ENVIRONMENTAL COMPLIANCE ASSESSMENT:

NORTH SPRINGFIELD LAKE
North Springfield, Vermont

PRELIMINARY FINDINGS REPORT
U.S.Army Corps of Engineers
New England Division
424 Trapelo Road
Waltham, Massachusetts
02254-9149

US Army Corps
of Engineers
New England Division

August 1993

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13. ABSTRACT (Maximum 200 words)

The environmental compliance assessment of North Springfield Lake in North Springfield, Vermont was conducted as part of the U.S. Army Corps of Engineers Environmental Review Guide for Operations (ERGO) program. There were four Major Deficiencies (Problems that require action and pose a threat to human health, safety or to the environment); fifteen Minor Deficiencies (Deficiency that is mostly administrative in nature which requires monitoring or planning for future mitigation); and eleven Management Practices (Items noted are not specifically covered by laws or regulations; however, they still require management attention). Overall, the project was well maintained as demonstrated by the lack of serious environmental deficiencies.

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MEMORANDUM THRU Chief, NRM Branch

THRU Chief, PORD

FOR Director of Operations

SUBJECT: Environmental Compliance Assessment of North Springfield Lake

1. Attached please find the Preliminary Findings Report for the Environmental Compliance Assessment conducted at North Springfield Lake utilizing the Environmental Review Guide for Operations (ERGO).

2. This compliance assessment was prepared by the NED ERGO Team, Bruce Williams (NED-OD-P), Jean Hamel (NED-OD-P), Jim Law (NED-OD-P), Mike Penko (NED-PL-IA), Townsend Barker (NED-ED-WQ), Jim Peck (NED-SO), and Anne Laster (NED-RE).

3. Upon approval of the assessment, the Project Manager will be tasked with development of an action plan to schedule and prioritize resources to correct findings identified in the ERGO assessment. In order that resources are programmed and dedicated to correct these problems, recommend that remediation which can be performed as routine maintenance work be completed within the next 3 years, other work should be programmed in the budget process for completion within 5 years.

4. I recommend your approval for implementation.

J. A. Hamel

J. A. HAMEL
Acting ERGO Program Manager

Atch

CMT 2

1. Environmental Compliance Assessment of North Springfield Lake is approved X disapproved_____ for implementation as stated.

10/22/93

J. C. WONG
Director of Operations

Atch

EXECUTIVE SUMMARY

An environmental compliance assessment of North Springfield Lake in North Springfield, Vermont was conducted by an interdisciplinary team of Corps of Engineers environmental professionals on 6 May 1993.

The assessment was conducted as part of the U.S. Army Corps of Engineers Environmental Review Guide for Operations (ERGO) program. The ERGO program, developed by the U.S. Army establishes the use of environmental compliance assessments to ensure compliance with all applicable Federal, state, local, Department of Defense (DoD), and U.S. Army environmental laws and regulations.

An overall ERGO compliance assessment considers 12 major environmental compliance categories. For each category, Federal, state and local laws, DoD and U.S. Army Corps of Engineers regulations, and good management practices are reviewed. Overall the project was well maintained as demonstrated by the lack of serious environmental deficiencies.

The findings at North Springfield Lake are as follows:

SIGNIFICANT DEFICIENCIES: None (0)

(Problems that pose a direct & immediate threat to human health, safety or to the environment)

MAJOR DEFICIENCIES: Four (4)

(Problems that require action and pose a threat to human health, safety or to the environment)

MINOR DEFICIENCIES: Fifteen (15)

(Deficiency that is mostly administrative in nature. These problems require monitoring or planning for future mitigation)

MANAGEMENT PRACTICES: Eleven (11)

(Items noted are not specifically covered by laws or regulations; however, they still require management attention)

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Introduction

North Springfield Lake Status

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THE ERGO PROGRAM

The U.S. Army Corps of Engineers initiated the Environmental Review Guide for Operations (ERGO) program as a comprehensive self-evaluation and program management system for achieving, maintaining, and monitoring compliance with environmental laws and regulations at Corps of Engineers projects and facilities. Objectives of the ERGO program are to:

1) Enhance Corps of Engineers environmental compliance at federal, state, and local levels.
2) Improve Corps of Engineers environmental management.
3) Build supporting financial programs and budgets.
4) Assure supervisors their environmental programs are being implemented effectively in accordance with Corps of Engineers goals and objectives.

Periodic internal environmental compliance assessments have been deemed necessary. These evaluations are designed to assess environmental compliance and provide necessary feedback to supervisors for organizing, directing, and controlling environmental compliance and protection activities.

The Corps of Engineers ERGO program began with the creation of a steering committee. Arrangements were made with the U.S Army Construction Engineering Research Laboratory (USACERL) to compile all relevant federal, Department of Defense, Army, and Corps of Engineers regulations to produce the draft manual.

The ERGO manual of environmental compliance assessments was pilot tested at various facilities in the Nashville District in May 1990. The program was field tested at several projects during FY 1991 and the manual was distributed as a final draft.

In January 1991, the Chief, Operations, Construction and Readiness Division (USACE), directed division and district operations offices to formally designate Environmental Compliance Coordinators (ECC's). Because it is responsible for the majority of USACE facilities, Operations Directorate was tasked with the development and implementation of the ERGO program.

New England Division's ERGO program became operational in August 1991. An ERGO assessment team was established by the ECC in October 1991. The ERGO program manager scheduled 8 projects, including North Springfield Lake for completion of environmental compliance assessments in FY-93.

ASSESSMENT PROCEDURES

The ERGO assessment of North Springfield Lake was conducted by a 6 person team comprised of NED personnel. The team followed a three phase approach. The first phase was to obtain pre-assessment information concerning its on-site activities (see Appendix A) and research applicable federal, state and local environmental regulations. This culminated in the development of site/facility-specific categories.

The second phase involved the on-site portion of the assessment. This involved an interview of project, district and/or regional management and staff, followed by a facility tour to obtain a general overview of facility operations. Typically, the team member would interview project staff responsible for a particular functional area, visually inspect the operations, and verify that required written documentation was in place. When possible, all deficiencies were reported to facility personnel. The team concluded the on-site portion of the assessment by briefing the project manager and staff to apprise them of the review team's preliminary findings.

The third phase involves developing the draft report and developing an action plan for addressing outstanding deficiencies. The evaluation of North Springfield Lake followed the above procedures and covered the elements set forth in the 12 ERGO compliance categories.

The assessment was conducted in accordance with the best professional judgement of the ERGO team members. It should be understood that the assessment is based on observations taken over a short span of time relative to the period under review. Efforts were directed toward reviewing major facets of environmental performance in the period covered, and therefore, it is important to recognize that this assessment may not necessarily identify all potential problems.

Successful completion of the site-specific environmental evaluation of North Springfield Lake was dependant on complete disclosure of all information regarding the operation and maintenance activities at the project.

It should be noted that failure of a facility manager to provide complete or adequate information to the review team does not relieve the facility manager of the responsibility for compliance with environmental regulations.

ERGO PROGRAM OBJECTIVES

The Environmental Review Guide for Operations (ERGO) program is intended to serve as the primary tool for conducting environmental compliance evaluations at Corps of Engineer projects and facilities. The objectives of the program are to:

1) Compile applicable Federal and Engineering Regulations associated with Corps of Engineers operations and activities.

2) Synthesize environmental regulations, good management practices, and risk management issues into consistent and easy to use checklists.

3) Serve as a reference document for daily operations.

4) Serve as a standard for evaluation of environmental compliance.

This section of the report presents a summary of findings in those categories that are governed by engineering regulations, engineering manuals, federal regulations, and state regulations. Non-regulatory items, which are referred to in this report as a management practices, are of a lower priority but require attention to correct.

Deficiencies noted in this evaluation will include the following information:

SIGNIFICANT DEFICIENCY:

A problem categorized as significant requires immediate attention. It poses, or has high likelihood of posing, a direct and immediate threat to human health, safety, the environment, or the installation mission.

MAJOR DEFICIENCY:

A problem categorized as major requires action, but not necessarily immediate action. It has the potential to result in a notice of violation from regulatory agencies. A major deficiency may pose a threat to human health, safety or the environment.

MINOR DEFICIENCY:

A minor deficiency is mostly administrative in nature, even though it might result in a notice of violation. It may also be a temporary or occasional instance of noncompliance.

MANAGEMENT PRACTICE:

A management practice is not considered a deficiency because it is not based on a specific regulatory requirement. Although items noted may not be specifically covered by regulation and are not assigned severity ratings, they still require management attention.

SUMMARY OF DEFICIENCIES
for
NORTH SPRINGFIELD LAKE

COMPLIANCE CATEGORY	FINDINGS			
	SIG.	MAJ.	MIN.	MGT.
Air Emissions				
Cultural and Historic Resources Management			1	
Hazardous Material Management		2	1	2
Hazardous Waste Management				1
Natural Resources Management			5	4
Pesticide Management			1	
Petroleum Oil and Lubricant (POL) Management		2		1
Solid Waste Management			3	2
Special Pollutants Management (Radon,Asbestos, PCB's,Noise)			1	1
Underground Storage Tanks (UST) Management				
Wastewater Management			1	
Water Quality Management			2	
Totals	0	4	15	11

AIR EMISSIONS MANAGEMENT

FINDING: There were no air emissions findings at North Springfield Lake.

FINDING: Minor Deficiency

CONDITION: Reconnaissance level cultural resources survey has been completed. Additional studies are needed to evaluate certain historic sites and areas having potential to contain prehistoric sites.

CRITERIA: Corps facilities are required to locate, inventory, and nominate all properties that appear to qualify for listing on the National Register of Historic Places (16 USC 470, 36 CFR 800, ER 1130-2-438).

EFFECT: Project is not in full compliance with Section 106 of the National Historic Preservation Act. Cultural resources may be at risk.

SOLUTION: Conduct additional studies to determine significance of sites as recommended by NED Division Archaeologist.

FINDING: Management Practice

CONDITION: Not all relevant regulations, directives, and guidance documents on hazardous materials are maintained at the facility. (ER-200-2-2)

CRITERIA: The following documents should be maintained and updated: 29 CFR 1910, 40 CFR 302, 49 CFR 172, 173, 178, 179, NEPA, ER 500-1-1, EM 385-1-1, applicable state/local regulations.

SOLUTION: Copies of all relevant materials will be distributed to the projects. Project Manager should maintain these materials in an organized and accessible manner and update as necessary.

COMMENTS: Knowledge of regulations required to assure safe and environmentally compatible handling of hazardous materials.

FINDING: Major Deficiency

CONDITION: Facility does not have a written Oil and Hazardous Substance Contingency Plan for spill events. (ER 1130-2-434)

CRITERIA: Facility required to have contingency plan which includes the following items: designated storage areas; designated individual for spill response; periodic drills; spill management equipment; emergency medical procedures, hazard control materials; emergency phone numbers; decontamination procedures.

SOLUTION: Plans are being developed for all projects. They will be included in the Federal Response Plan and the Flood Emergency Plan.

COMMENTS: Plan is necessary to insure that proper and timely action is taken during spill events to minimize environmental harm and insure public health and safety.

FINDING: Management Practice

CONDITION: Facility has not coordinated with the local fire department concerning types of hazardous chemicals used at the facility, the areas used, and quantities used in a given operation.

CRITERIA: Review local coordination efforts with the local fire department to insure the department is aware of areas that are at high risk for chemical incidents.

EFFECT: Coordination may provide valuable information for fire dept. personnel regarding methods of extinguishing the blaze, maximizing personal safety, and notification/evacuation of adjoining areas.

SOLUTION: Project Manager should contact and maintain a continuous relationship with local fire department on the identity of materials on site.

FINDING: Major Deficiency

CONDITION: Facility does not have an MSDS sheet for each hazardous chemical stored on site as required by 40 CFR 1910.1200 (q)(1) and 1910.1200 (q)(8) Project Manager should continue to independently obtain MSDS's when purchasing chemicals in the future.

CRITERIA: MSDS is to be on file and accessible to workers on all shifts in the workplace for each hazardous material used or stored.

SOLUTIONS: Safety and Occupational Health Office is currently reviewing chemical lists obtained from each project. From this listing MSDS's will be distributed to the projects and stored in an orderly and highly visible fashion. Project Managers will independently obtain MSDS's when purchasing new chemicals.

COMMENTS: MSDS's necessary to assure proper product use and to mitigate harmful effects.

FINDING: Minor Deficiency

CONDITION:
1. Inside flammable/combustible storage room does not meet minimum specifications.
2. Storage room does not meet parameters for ventilation and containment specified in NFPA 30 4-4.1.2 Flammable and Combustible Liquids and 29 CFR 1910.106(d)(4).

CRITERIA:
1) Fire resistant walls, sill or ramp separating adjacent rooms
2) Liquid tight floor/wall joints
3) Self closing fire doors
4) NEPA approved electrical wiring
5) Suitable capacity exhaust system
6) Clear isles.
7) A raised sill or ramp must be provided to adjacent rooms and buildings. Ventilation must provide for six changes of air per hour.

SOLUTION:
1. Project Manager should construct sill at entrance which has a minimum height of 4 inches.
2. An exhaust fan of sufficient capacity should be installed to avoid buildup of chemical air flow vapors. Ventilation system must meet the requirements of EM 385-1-1 09.B.24.
   a. System shall provide for a complete change of air with the room at least 6 times per hour.
   b. System shall commence not more than 12 inches above the floor.

COMMENTS:
1. Sill will prevent spilled materials from migrating to adjacent floor drain.
2. Poor ventilation in the paint room creates an unhealthy environment and potential fire hazard for workers.
3. Engineering has developed plans to retrofit project storage rooms to provide sufficient ventilation.

FINDING: Management Practice

CONDITION: Not all relevant regulation, directives, and guidance documents on hazardous wastes are maintained at the facility.

CRITERIA: The following documents should be maintained and updated: 40 CFR 260-271, 40 CFR 372, 49 CFR 172-179, NEPA, state hazardous waste regulations, policy letters, ER 1130-2-434.

SOLUTION: Copies of all relevant materials are being compiled and will be distributed to the projects. Project Manager should maintain these materials in an organized and highly visible manner and update as required.

COMMENTS: Knowledge of regulations required to assure safe and environmentally compatible handling of hazardous materials.

FINDING: Minor Deficiency

CONDITION: A detailed field survey to determine if any federal or state listed threatened or endangered species occur in the project area is lacking. Without such a survey, the possibility that normal project operations may harm listed species cannot be ruled out.

CRITERIA: The Federal Endangered Species Act (16 USC 1536) prohibits actions which jeopardize the continued existence of threatened or endangered species, or destroy or adversely affect critical habitat of such species. Similar protection is provided by the Vermont Endangered Species Act.

SOLUTION: Program funds to conduct a survey of project area to determine if any additional rare, threatened, or endangered species are present. If any are found, management plans for the species should be developed and implemented.

FINDING: Management Practice

CONDITION: The existing Environmental Assessment/FONSI for operation and maintenance activities does not accurately address current conditions at the project and project impacts.

CRITERIA: An updated Environmental Assessment describing existing project conditions and impacts of project operation on natural and cultural resources should be available.

SOLUTION: Update Environmental Assessment/FONSI.

FINDING: Management Practice

CONDITION: Material dredged from North Springfield Lake in 1992 was not disposed in the designated and identified upland disposal area. Best management practices recommended by IAD were not implemented. Deficiencies are as follows:

1. Dredged material was disposed near the dam spillway. The disposal area contained approximately .6 acres of low functional value wetland (Photo #12).
2. Siltation controls were not installed.
3. Disturbed area was not re-seeded (Photo #1).

CRITERIA: 1. Maintenance dredging projects at Corps civil works projects require an Environmental Assessment unless dredged material is disposed at an existing upland disposal site (33 CFR 230.9)
2. Filling of wetlands violated Corps Section 404 regulations promulgated under the Clean Water Act, ER 1105-2-100, and NEPA.

3. Best management practices recommended by IAD to control erosion and sedimentation during the project in a 27 July 1992 memorandum were not implemented. Management Practices for proposed work should be fully incorporated into projects. The purpose of subject recommendations is to assure that environmental concerns are fully reviewed, evaluated, and addressed. The Corps is committed to leadership in environmental compliance.

SOLUTION: In the future Project Manager should
1. Dispose of dredged material only at designated and identified upland disposal areas.
2. fully implement the best management practices that are conditions for approval of proposed construction and maintenance work.

FINDING: Minor Deficiency

CONDITION: Project OMP (Operations Management Plan) has not been developed in coordination with the planning, real estate and safety elements of the project.

CRITERIA: All Corps facilities are required to develop and maintain a project operational management plan (OMP). (ER1130-2-400 para. 6 and para. 9 through 11 Appendix B.)

SOLUTION: 1) Develop an OMP in accordance with ER 1130-2-400 and assure that it addresses all operational projects in the Master Plan (ER 1130-2-435).
2) Verify that the OMP has been approved by the Division Commander.
3) Verify that the OMP is updated as required.

COMMENT: All project OMP's (including North Springfield Lake) are scheduled for completion and approval by 1 April 94.

FINDING: Minor Deficiency

CONDITION: Sand was placed below normal water level in Stoughton Pond to nourish recreational beach without proper evaluation under Section 404 of Clean Water Act.

CRITERIA: Corps actions must comply with Clean Water Act requirements Note: fills up to 25 cubic yards qualify for a Corps Nationwide permit (33 CFR 330).

SOLUTION: Future beach nourishment projects should be reviewed for Clean Water Act compliance. Project Manager should coordinate with IAD to obtain a Nationwide permit for routine and recurring beach maintenance activities.

FINDING: Management Practice

CONDITION: Wetlands at the project have not been identified.

CRITERIA: Wetlands should be identified and protected. All activities in the wetlands are to be conducted in accordance with state and federal regulations.

SOLUTION: A wetlands survey should be conducted to identify and delineate wetlands at the project.

FINDING: Minor Deficiency

CONDITION: No survey of shoreline or land erosion at Project is available.

CRITERIA: Measures shall be provided to control erosion damage to land (ER 1130-2-400 and EM 1110-1-400).

SOLUTION: Survey Project lands for erosion, and implement a shoreline and land erosion control plan.

FINDING: Management Practice

CONDITION: There are no minimum release rates established at North Springfield Dam during normal and/or low flow periods. The project storage requirements were designed such that all outflow be maintained equal to inflow during non-flood periods. The project was not designed to augment low flows. During flood periods, however, minimum releases are maintained between 10-15 cfs in an effort to support downstream aquatic life in the immediate proximity of the project without contributing significantly to the downstream flood condition. At projects like Springfield Dam, where each gate has its own discharge conduit, releases are maintained during Periodic Inspections by opening gates in other conduits not being inspected.

CRITERIA: Periodic Inspections and routine maintenance require, at times, that discharge be reduced to allow safe access to the outlet conduit for short durations (less than one hour). These unavoidable flow conditions should be gradually made to minimize stranding of downstream aquatic life.

SOLUTION: Planned (non-emergency) closure schedules for maintenance and inspection should be coordinated with Fish and Wildlife Service and State Fish and Game to ensure that critical seasons which might impact aquatic life are avoided.

FINDING Minor Deficiency

CONDITION 1: Master Plan for the project is outdated and does not reflect current development of natural or man-made resources at this project.

CRITERIA: ER 1130-2-435 section (10)(a) requires scheduling of revision of master plans within 5 years of date of the regulation, 30 December 1987.

SOLUTION: Program resources to update Master Plans within next five years.

CONDITION 2: The Fish and Wildlife Management Plans (Appendix D to the Master Plan) are outdated and do not emphasize the maintenance and restoration of habitat favorable to the production of indigenous fish and wildlife (5 year management plans are dated March 1982 and expired March 1987).

CRITERIA: Fish and Wildlife plans must address the management of all indigenous species and be based upon the following:

- inventory of fish and game species
- inventory of endangered, threatened and other special interest plant or animal species
- survey of non-game wildlife other than endangered species
- verify that fishing, hunting and trapping are authorized and controlled in conformance with Federal and state laws, local regulations and approved management plans (ER 1105-2-50, para. 2-1).

SOLUTION:
1. Update the current Fish and Wildlife Management plans to include and emphasize items mentioned above.
2. Assure that State F & W management plans are kept current and included into the Project plan.

CONDITION 3: The Forest Management Plan (Appendix B to the Master Plan) is outdated and does not adequately address the provisions for sustained production of timber and/or be compatible with multiple use resource management objectives. Five year management plan dated March 1982 expired March 1987.

CRITERIA: The Forest Management Plan must be current and include the following: (ER 1130-20400 para. 11(1)).

- volume inventories conducted and kept current
- small volume (including firewood) sales are in accordance with regulations
- harvesting and treatment
- sustained yield
- improve vegetation conditions
- control pests
- improve watersheds
- improve wildlife habitat
- complement natural beauty values

SOLUTION: The Forest Plan needs to be revised and updated to include provisions that address the resource management objectives listed above.

FINDING: Minor Deficiency

CONDITION: Proposed/Actual use of pesticide reports, received by Project Manager, are not forwarded to Real Estate.

CRITERIA: Real Estate is responsible for collecting on outgrants, the Proposed/Actual use of Pesticides report by 3 Jan. of each year beginning 31 Jan. 1991. Project Offices should furnish a copy of the proposed & actual use request to Real Estate as information is received. (ER 1130-413. 6(c)).

SOLUTION: Real Estate should be furnished with a copy of the information that the lessor sends to the Project Manager.

PETROLEUM OIL AND LUBRICANT (POL) MANAGEMENT

FINDING: Management Practice

CONDITION: The facility does not have ready access to a current file of applicable federal, Corps, and state/local POL regulations.

CRITERIA: The following regulations should be maintained: 29 CFR 1910, 33 CFR 153, 40 CFR 110, 112, 40 CFR 266, EM 385-1-1, EP 415-1-261, ER 500-1-1, appropriate state/local regulations.

SOLUTION: Copies of all relevant materials will be distributed to the projects. Project Manager should maintain these materials and update as necessary.

COMMENTS: Knowledge of regulations needed to assure proper handling of POL materials.

FINDING: Major Deficiency

CONDITION: Fuel storage tank at Upper Connecticut River Basin Office lacks secondary containment. (Photograph 2)

CRITERIA: Regulation EM 385-1-1, Sec. 09.8.27.(c) requires that all above ground storage tanks be provided with secondary containment sufficient to contain 110% of the tanks total volume.

SOLUTIONS: Project personnel to issue purchase request for masonry or steel containment structure. Work to be completed no later than FY 94.

COMMENTS: Secondary containment needed to prevent leaking product from contaminating adjacent areas.

PETROLEUM OIL AND LUBRICANT (POL) MANAGEMENT

FINDING: Major Deficiency

CONDITION: Hydraulic system for gate movement in North Springfield control tower lacks secondary containment. (Photographs 3 & 4)

CRITERIA: Regulation EM 385-1-1, Sec. 09.8.27.(c) requires that all above ground storage tanks be provided with secondary containment sufficient to contain 110% of the tanks total volume.

SOLUTION: Project personnel should procure and install an appropriate masonry or steel containment structure to provide secondary containment.

Comments: Secondary containment needed to prevent leaking product from contaminating adjacent areas.

FINDING: Minor Deficiency

CONDITION: A small open dump is present on a steep embankment along the east shore of North Springfield Lake near project office. Dirt fill, rock, concrete rubble, and asphalt rubble have been disposed at the site. Little other waste is present. No debris have been placed in wetlands. (Photograph 5)

CRITERIA: Operation of uncertified solid waste management sites is prohibited in Vermont (Section 6-302 of Vermont Solid Waste Management Rules). Disposal below 100 year flood stage elevation is prohibited (6-502). The 1992 Federal Facilities Compliance Act requires federal agencies to fully comply with substantive and administrative requirements of state and local solid waste disposal regulations.

EFFECT: The dump technically violates state law but poses little risk to environment.

SOLUTION: Discontinue use of the site. Inform Vermont Solid Waste Management Division of existing conditions at the project and work with them to develop an acceptable waste management plan or landfill closure plan.

FINDING: Management Practice

CONDITION: Various items of questionable utility are stored at the project. These include tires, creosote coated timbers, and scrap metal (Photographs 6, 7 and 8).

CRITERIA: Excess material should be stored in an orderly manner. Items not likely to be of future use should be properly disposed.

SOLUTION: Assess need for items stored at the site. Items not likely to be of future use should be properly disposed. Scrap metal should be recycled.

FINDING: Minor Deficiency

CONDITION: An unauthorized structure is present in a forested area near the dam (photograph 9). Debris is scattered in and around the structure.

CRITERIA: Unauthorized structures are not permitted on Corps Property.

SOLUTION: Remove and properly dispose of structure and associated debris.

FINDING: Minor Deficiency

CONDITION: Trash receptacles used in the recreation area do not have covers.

CRITERIA: Trash receptacles should have functioning lids (40 CFR 243.200-1(a) and EM 385-1-1).

EFFECT: Unsanitary conditions.

SOLUTION: Provide trash receptacles with lids prior to the beginning of the 1994 Recreation Season.

FINDING: Management Practice

CONDITION: Project recycles corrugated cardboard and office paper, but not glass, tin cans, aluminum cans, plastic containers, or newsprint.

CRITERIA: Project should take measures to conserve natural resources, minimize generation of solid waste, and recycle wastes whenever possible.

EFFECT: Waste of resources and landfill space.

SOLUTION: Expand recycling program to include glass, metal cans, newsprint, and certain types of plastic containers. Call Town of Springfield for information about the town's voluntary recycling program.

SPECIAL POLLUTANTS MANAGEMENT, NOISE

FINDING: Management Practice

CONDITION: A log is not maintained to log complaints on noises produced by Corps of Engineer activities and operations.

CRITERIA:
1) A single point of contact should be identified to address noise complaints.
2) This POC should keep a written log of complaints on noises produced by Corps of Engineer activities and operations.

SOLUTION:
1) Establish a Noise Complaint Log
2) Identify POC for both projects

SPECIAL POLLUTANTS MANAGEMENT, PCB's

FINDING: Minor Deficiency

CONDITION: Transformer in the North Springfield has no record of ever being tested for PCB's. (Photograph 10)

CRITERIA: ER-200-2-2, para. 20 requires facility to abide by state and local regulations. 40 CFR 761.40 and 761.45 requires that certain equipment containing PCB's must be marked with an M_L marking. 40 CFR 761.30(a)(1)(vi)requires PCB transformers are subject to certain registration requirements.

SOLUTION: Project Manager should make arrangements to find records of installation or have the transformer tested to detect whether PCB's are present. If PCB's are detected recommend the transformer be replaced.

UNDERGROUND STORAGE TANKS (UST'S) MANAGEMENT

FINDING: There were no underground storage tank findings at North Springfield Lake.

WASTEWATER MANAGEMENT PROGRAM

Corps operated facilities at North Springfield Lake include the project office, operator's quarters, Upper Connecticut River Basin, Stoughton Pond recreation area, and Springweather Nature Area. Wastewater is generated at the project and basin offices, operator's quarters, and Stoughton Pond. Wastewater is disposed through septic tanks and leaching fields. Septic tanks were not physically inspected during the 5 May 1993 ERGO inspection. Project personnel reported there have been no problems with any of these systems. The project office and operator's quarters discharge to the same 1,000-gallon septic tank and leaching field, located in the field behind the buildings. The system was installed around 1958 to 1960 when the flood control project was built. The septic tank, pumped about once a year, was last pumped in 1992. The leach field is at an elevation high enough so it is not flooded by water impounded by the dam. The basin office and its 1,000-gallon septic tank were constructed in 1991. The tank has yet to require pumping; project personnel estimate pumping will be needed every three years.

Pit toilets at Stoughton Pond were replaced with a 1,000-gallon septic tank and leaching field in 1977. The septic tank has never been pumped.

The only storm drain system collects water from parking lot drains at the project office and discharges to the reservoir and Black River. These storm sewers do not receive any industrial, sanitary, or agricultural waste or runoff, and, therefore, do not require a permit under the NPDES program.

There are no point source discharges or discharges to public wastewater treatment facilities at North Springfield Lake. The NPDES permit requirement under 32 CFR 650.66 does not extend to discharges from separate storm sewers, except where storm sewers receive industrial, municipal, or agricultural wastes or runoff, or where runoff has been identified by EPA's Regional Administrator, the State Water Pollution Control Agency or an Interstate Agency as a significant contributor of pollution.

WASTEWATER MANAGEMENT

FINDING: Minor Deficiency.

CONDITION: Unregistered injection wells, in the form of floor drains, are located in garages in project offices. (Photograph 11)

CRITERIA: Section 1422 of the Safe Drinking Water Act requires States to develop underground injection control programs. Vermont's Underground Injection Control Rule, developed under Chapter 11 of Vermont Environmental Protection Regulations, was developed to reduce groundwater contamination by controlling injection wells. Under Chapter 11, floor drains in vehicle maintenance bays must either be sealed, or registered with the State of Vermont. If a registered well is considered a high risk by the State of Vermont, a permit may be required. If the drain is sealed, vehicle fluid spills must be cleaned up with an absorbent material and properly disposed.

SOLUTION: Seal garage floor drains so they no longer are injection wells, or initiate registration with the State of Vermont. If registration is chosen, contact Hydraulics and Water Quality Branch, or the Vermont Water Supply Division (802 244-1562) for registration forms.

WATER QUALITY MANAGEMENT

The Corps supplies potable water to the Upper Connecticut River Basin office and rest rooms at the Stoughton Pond recreation area from Corps wells. Drinking water is supplied to the project office and operator's quarters by the Town of Springfield. The well serving the basin office supplies only one building which is used by fewer than 25 people a year, but not the same people, it is a transient noncommunity water supply.

The basin office well is located about 80 feet behind, and slightly uphill from, the building. It was drilled to a depth of 240 feet in October 1991. The 6-inch diameter well has a 20 foot by 4 inch casing. A 3/4-horsepower pump yields seven gallons per minute.

Stoughton Pond's well is about 150 feet uphill, and across the access road from the restrooms. The 6-inch diameter well was drilled to a depth of 310 feet in the early 1970's, possibly 1972. It has 20 feet of casing. A 1/3-horsepower pump yields 1.5 gallons per minute.

NED's Environmental Laboratory in Barre Falls, Massachusetts, monitors water quality at the basin office and Stoughton Pond wells. Total coliform bacteria are measured at least quarterly during the months when wells are open, and nitrate was measured every 3 years. Beginning in 1993, in compliance with Vermont regulations, nitrate will be measured annually and nitrite every 3 years at Stoughton Pond well.

The NED lab is not certified by Vermont because, at present, Vermont has not established procedures for certifying out-of-State labs. However, the NED lab is certified by the Commonwealth of Massachusetts and EPA; consequently, Vermont will accept results from the Corps lab until out-of-State certification procedures are established.

WATER QUALITY MANAGEMENT

FINDING: Minor deficiency.

CONDITION: Stoughton Pond's well is a public water supply operated without operator certification.

CRITERIA: Under 40 CFR 142.10 (adopted under Provisions of the Safe Drinking Water Act--Public Law 93-523), a State has primary enforcement responsibility for public water systems. The Vermont Department of Environmental Conservation, Water Supply Division, requires public water supply well operators to be certified in accordance with the Vermont Water Supply Rule, Chapter 21-12.

SOLUTION: Apply to the Water Supply Division for water system operator certification (without examination). Point of contact is Mr. Robert Millham, Compliance Coordinator, telephone number 802-244-1562.

FINDING: Minor deficiency.

CONDITION: Results of routine monitoring of potable water sources are to be reported to the State within 24 hours.

CRITERIA: Prompt reporting of potable water monitoring results is required under provisions of the Safe Drinking Water Act--Public Law 93-523.

SOLUTION: Once water supply operator certification is obtained, sampling and testing results of routine monitoring performed by the NED lab shall be reported by the lab to the State within 24-hour period. The operator certification identification number assigned by Vermont must be included. Point of contact is Mr. Robert Millham at the Water Supply Division, 802-244-1562.

WATER QUALITY MANAGEMENT

BEACH WATER QUALITY MONITORING PROGRAM

Waters at North Springfield Lake are designated as class B, which are suitable for drinking water supply after disinfection, fishing, swimming, and all other water uses.
The Corps monitors water quality at the Stoughton Pond beach. NED monitors this swimming area in accordance with water quality standards for class B fishable/swimmable waters based on E. coli bacteria.

RESERVOIR WATER QUALITY PROGRAM

The NED reservoir water quality management program at North Springfield Lake has multiple goals. Its primary purpose is to protect public health and safety, but additional goals include meeting State water quality standards, maintaining water quality suitable for all project purposes, and understanding the effects of project operations on water quality. NED's Water Quality Team meets as needed, during the year, to determine needs at each project and carry out the annual program.

Although water quality management is not a defined purpose at any project operated and maintained by NED, the Corps has a strong interest in water quality. Executive Order 11752, "Prevention, Control, and Abatement of Environmental Pollution at Federal Facilities," 19 December 1973, makes it a stated national policy that the Federal Government, in the design, construction, management, operation, and maintenance of its facilities, shall provide leadership in the nationwide effort to protect and enhance the quality of air, water, and land resources. Section 102b of the Federal Water Pollution Control Act Amendments of 1972 places responsibility with EPA for determination of the need for, the value of, and the impact of storage for water quality control in any reservoir project not in a construction status as of 18 October 1972. The responsibility for water quality at our projects, however, clearly rests with the Corps since it is an integral part of water control management activities (reference ER 1130-2-334, dated April 1986, and ER 1130-2-415, dated October 1976).

NEW ENGLAND DIVISION
ERGO TEAM

Bruce Williams Program Manager
Operations Directorate
Project Operations and Readiness Division
Environmental Compliance Coordinator - NED
Member, NED's Water Quality Team

Jean Hamel
Operations Directorate
Project Operations and Readiness Division
Acting Environmental Compliance Coordinator - NED

Jim Law
Operations Directorate
Project Operations and Readiness Division

Mike Penko
Planning Directorate
Impact Analysis Division
Endangered Species Coordinator - NED

Townsend Barker
Engineering Directorate
Water Control Division
Chairman, NED's Water Quality Team

Jim Peck
Safety and Occupational Health Office
Safety Manager - NED

Anne Laster
Real Estate Directorate
Conveyancing Division

The ERGO team appreciates the efforts of the following individuals who participated in the pre-assessment and field inspection and/or in the research and evaluation of environmental compliance guidance:

North Springfield Lake

Thomas Snow - Park Ranger

Upper Connecticut River Basin Office

Mike Curran - Basin Manager
Gary Pelton - Basin Ranger

Appendix A

ERGO

Environmental Review Guide for Operations

PRE-ASSESSMENT ENVIRONMENTAL MANAGEMENT QUESTIONNAIRE

This questionnaire will provide background information necessary to plan and conduct an environmental compliance assessment.

Name of Facility: N.S.L.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 1, Air Emissions Management:		
1. Does facility operate a fuel burner (central steam plant, or hot water or hot water steam boiler)?	_____	If **YES** see ERGO items 1-4 through 1-15.
2. Does facility operate an incinerator?	_____	If **YES** see ERGO items 1-16 through 1-18.
3. Does facility dispense, store, or transfer gasoline? 5% cond ; 90% max. at any given time	✓	If **YES** see ERGO items 1-19 through 1-23.
4. Does facility have volatile organic compounds (VOCs)(generally, but not exclusively, found in solvents)?	_____	If **YES** see ERGO items 1-24 through 1-28.
5. Does facility have fugitive emissions from volatile hazardous air pollutant (VHAP) equipment?	_____	If **YES** see ERGO items 1-29 through 1-35.
6. Does facility use VOC-based solvent degreasers?	_____	If **YES** see ERGO item 1-36.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE

SECTION 2, Cultural and Historic Resources Management:

1. Does the facility have any properties under its jurisdiction?
cultural res. study complete. land + res. protected

✓ If YES see ERGO items 2-4 through 2-10.

2. Does the facility have cultural resources? List the facility's cultural resources below:
see cul. res. inventory

✓ If YES see ERGO items 2-11 through 2-14.

_____
_____
_____

a. Are the facility's master plan or operational management plan (OMP) public documents?

✓ If YES see ERGO item 2-13.

3. Does the facility have an operational project?

____ If YES see ERGO item 2-15.

4. Does the facility have any Native American graves or artifacts, or have any been discovered during an operation?

____ If YES see ERGO item 2-16.

5. Does the facility have an archeological or historical collection?

____ If YES see ERGO items 2-17 through 2-28.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 3, Hazardous Materials Management:		
1. Does the facility store any hazardous materials? paint locker	✓	If YES see ERGO items 3-5 through 3-8.
2. Have there been any releases of hazardous substances at the facility?	____	If YES see ERGO items 3-9 through 3-11.
3. Are there any extremely hazardous substances at the facility?	____	If YES see ERGO item 3-12 and 3-13.
4. Does the facility: Have extremely hazardous substances in excess of 500 lbs or the threshold planning quantity (see appendix III-1); have hazardous chemicals in excess of 10,000 lbs; or fall under Standard Industrial Classification Codes 20 to 39?	____	If YES see ERGO item 3-12 and 3-13.
5. Does the facility store compressed gases, flammable/combustibles, or acids? acetylene + oxygen & cutting	✓	If YES see ERGO items 3-14 through 3-27.
6. Does the facility transport hazardous material, or offer such materials for transport?	____	If YES see ERGO items 3-28 through 3-31.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE

SECTION 4, Hazardous Waste Management:

1. Is facility a generator of hazardous waste? ____ If YES see ERGO items 4-8 through 4-15.

a. Is facility a small quantity generator? ____ If YES see ERGO items 4-16 through 4-18.

b. Is facility a very small quantity generator? ✓ If YES see ERGO item 4-19.

materials are properly disposed of.

Complete this section before proceeding.

Any waste which is not excepted, which is listed in 40 CFR 261, or which exhibits the following characteristics is a hazardous waste:

- Ignitability (flash point <140 F)
- or Corrosivity (pH <2 or >12.5)
- or TCLP Toxicity (for As,Ba,Cd,Cr,Pb,Hg,Se,Ag, and selected pesticides.
- or Reactive. (or CN)

The following are hazardous wastes that may typically be found at a Corps facility:

CHECK IF USED AT THIS FACILITY		Vol Gen/mo lb.	Vol Gen/mo Kg.	Vol Accum lb.	Vol Accum Kg.
✓	Solvents	1/4	—	4	—
✓	Liquid Paint	1/4	—	40	—
✓	Paint stripper, remover, or thinner	1/4	—	16	—
—	Spray paint booth air filters	—	—	—	—
—	Pesticides, Insecticides, Herbicides, etc.	—	—	—	—
—	NBC filters and test kits	—	—	—	—
—	DS2 (diethlene triamine)	—	—	—	—
—	STB (super topical bleach)	—	—	—	—

___	Ordnance, ammunition, explosives & residues	___	___	___	___
✓	Battery acid & Caustics (in unserviceable batteries)	2	___	48	___
___	Some pharmaceuticals	___	___	___	___
___	POL Tank Farm fuel system filters	___	___	___	___
✓	De-icing solution	1/8	___	6	___
___	Printing ink, ink solvents and cleaners	___	___	___	___
✓	Absorbent materials and soil contaminated with hazardous waste Speedy dry	1	___	1	___
___	Other_____	___	___	___	___
___	Other_____	___	___	___	___
___	Other_____	___	___	___	___
	TOTAL	___	___	___	___

* e.g., Trichlorethane, Methylene, chloride, Tetrachloroethylene, 1,1,1 Trichloroethane, Carbon Tetrachloride, Chlorinated Fluorocarbons, Toluene, MEK, Break-free in liquid form, Mineral Spirits, Xylene

USEPA Generator Designation: ___ Unregulated ___ Small Qty ___ Large Qty

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
2. Does facility export/import hazardous waste from/to the United States?	____	If **YES** see ERGO items 4-23 through 4-31.
3. Does facility transport hazardous waste? batteries - 2 oz + liquid waste 10 gl. ea. to warehouse for disposal	✓	If **YES** see ERGO items 4-32 through 4-37.
4. Does facility have a treatment, storage, or disposal facility (TSDF)?	____	If **YES** see ERGO items 4-38 through 4-74.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
a. Does the TSD facility receive waste from a foreign source?	____	If YES see ERGO item 4-42.
b. Does facility receive waste from off-site sources?	____	If YES see ERGO items 4-46 and 4-47.
c. Does facility handle ignitable, reactive, or incompatible wastes?	____	If YES see ERGO item 4-65 and 4-67.
5. Does facility have hazardous waste containers? In paint locker · used oil · paint thinner shipped to warehouse	✓	If YES see ERGO items 4-75 through 4-86.
6. Does facility store hazardous wastes in tanks?	____	If YES see ERGO items 4-87 through 4-101.
7. Does facility use surface impoundment as a means of treatment, storage, or disposal of hazardous wastes?	____	If YES see ERGO items 4-102 through 4-110.
8. Does facility have waste piles?	____	If YES see ERGO items 4-111 through 4-118.
9. Does facility have land treatment of hazardous waste?	____	If YES see ERGO items 4-119 through 4-126.
10. Does facility have hazardous waste in landfills?	____	If YES see ERGO items 4-127 through 4-137.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
11. Does facility incinerate hazardous waste?	_____	If **YES** see ERGO items 4-138 through 4-147.
12. Does facility dispose of hazardous waste in miscellaneous units?	_____	If **YES** see ERGO items 4-148 and 4-149.
13. Does facility have thermal treatment facilities?	_____	If **YES** see ERGO items 4-150 through 4-152.
14. Does facility have chemical, physical, or biological treatment facilities?	_____	If **YES** see ERGO items 4-153 through 4-155.
15. Does facility have restricted wastes?	_____	If **YES** see ERGO items 4-156 through 4-168.
SECTION 5, Natural Resources Management:		
1. Does facility have any construction projects?	✓	If **YES** see ERGO item 5-4.
2. Does facility have land management responsibilities?	✓	If **YES** see ERGO items 5-7 and 5-8.
3. Does facility have floodplains or wetlands?	✓	If **YES** see ERGO item 5-9.
4. Does facility contain a shoreline?	✓	If **YES** see ERGO item 5-12.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
5. Does facility have endangered or threatened species?	____	If **YES** see ERGO items 5-13 and 5-14.
SECTION 6, Pesticides Management:		
1. Do facility personnel engage in the application of pesticides?	____	If **YES** see ERGO items 6-7 through 6-16.
2. Does facility store, mix, or formulate pesticides?	____	If **YES** see ERGO items 6-17 through 6-28.
a. Does facility store/use pesticides classified highly toxic or moderately toxic (bearing DANGER, POISON, WARNING, or the skull and crossbones symbol)?	✓	If **YES** see ERGO items 6-20 through 6-27.
3. Does facility dispose of pesticides?	____	If **YES** see ERGO items 6-29 through 6-33.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 7, Petroleum, Oil and Lubricant (POL) Management:		
1. Does the facility store, transport, or dispense petroleum products?	✓	If **YES** see ERGO items 7-5 through 7-12.
2. Have there been any discharges of oil at the facility?	____	If **YES** see ERGO items 7-13 through 7-14.
3. Does the facility have any bulk storage tanks over 660 gallons?	____	If **YES,** see ERGO item 7-16.
4. Does the facility use dikes as a means of containment for petroleum storage tanks?	____	If **YES** see ERGO items 7-17 and 7-18.
5. Does the facility have any pipelines?	____	If **YES** see ERGO items 7-20 through 7-22.
6. Does the facility sell used oil?	____	If **YES,** see ERGO item 7-23.
SECTION 8, Solid Waste Management:		
1. Does the facility collect or store solid waste on site?	____	If **YES,** see ERGO items 8-4 through 8-12.
2. All Corps facilities must should recycle and reduce solid waste.	____	See ERGO item 8-13.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
a. Does facility have over 100 office workers?	____	If YES see ERGO item 8-14.
b. Do more than 500 families reside at the facility?	____	If YES see ERGO item 8-15.
c. Does the facility generate waste corrugated containers?	____	If YES see ERGO item 8-16.
3. Does facility have land disposal on site? clean fill	✓	If YES see ERGO items 8-17 through 8-31.
a. Does facility dispose of water treatment plant sludges?	____	If YES see ERGO 8-18.
b. Does facility dispose of incinerator or air pollution control residues?	____	If YES see ERGO item 8-19.
c. Does the facility accept special wastes?	____	If YES see ERGO item 8-21.
4. Does the facility have a closure site?	____	If YES, see ERGO items 8-32 and 8-33.
5. Does the facility have a new landfill site?	____	If YES, see ERGO items 8-34 and 8-35.
6. Does facility have a thermal processing facility?	____	If YES see ERGO items 8-36 through 8-49.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
7. Does the facility utilize resource recovery facilities?	_____	If YES see ERGO items 8-50 and 8-51.
a. If the facility does NOT utilize resource recovery facilities, a report must be filed with the Administrator explaining the decision not to utilize.	_____	See ERGO item 8-50.
SECTION 9, Special Pollutants Management:		
1. Does facility have PCBs of any kind?	_____	If YES, see ERGO items 9-4 through 9-11.
a. Does facility have a PCB waste landfill?	_____	If YES, see ERGO item 9-10.
b. Does facility have PCB storage or disposal facilities?	_____	If YES, see ERGO item 9-11.
2. Does facility have PCB transformers?	_____	If YES, see ERGO items 9-12 through 9-18.
3. Has facility had a PCB spill?	_____	If YES see ERGO item 9-19.
4. Does facility have PCB Items (PCB-contaminated heat transfer or hydraulic systems, electromagnets, switches, voltage regulators, capacitors, circuit breakers, reclosers, or cables)? Volt. reg. in G.H. Transformer	✓	If YES see ERGO items 9-20 through 9-23.
5. Does facility use PCBs in research?	_____	If YES see ERGO item 9-24.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
6. Does facility store PCBs?	____	If YES see ERGO items 9-25 through 9-29.
7. Does facility transport PCBs or PCB Items?	____	If YES see ERGO items 9-30 and 9-31.
8. Does facility dispose of PCBs or PCB Items?	____	If YES see ERGO items 9-32 through 9-41.
9. Does facility demolish, renovate, or strip components from structures containing friable asbestos?	____	If YES see ERGO items 9-42 through 9-52.
10. Does facility dispose, or transport for disposal, asbestos or asbestos-containing waste?	____	If YES see ERGO items 9-53 through 9-57.
11. Is facility located in an area with a potential radon problem? tested. Tests negative	✓	If YES see ERGO items 9-58 through 9-60.
12. Does facility have any possible sources of noise pollution, or have a noise hazardous area? const. projects - not been a problem	✓	If YES see ERGO items 9-61 through 9-68.

SECTION 10, Underground Storage Tanks (USTs) Management:

1. Does facility have organizational fuel tanks?	____	If YES see ERGO item 10-5.
2. Has facility repaired, or is it planning to repair, a UST?	____	If YES see ERGO item 10-10.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility have hazardous waste USTs?	_____	If **YES** see ERGO item 10-19.
4. Does facility have a deferred UST?	_____	If **YES** see ERGO item 10-20.
5. Does facility have a metallic UST?	_____	If **YES** see ERGO items 10-23 and 10-35.
6. Does facility have newly-installed USTs (i.e., after May, 1986)? 3 500 gl. Tanks	✓	If **YES** see ERGO items 10-24 through 10-27.
7. Have facility USTs undergone a change of service, or closure?	_____	If **YES** see ERGO items 10-28 through 10-34.
8. Does facility have substandard USTs?	_____	If **YES** see ERGO item 10-35.
SECTION 11, Wastewater Management:		
1. Does facility have a floating plant?	_____	If **YES** see ERGO item 11-4.
2. Does facility have any point source discharges, or does facility have domestic sewage treatment plants?	_____	If **YES** see ERGO items 11-5 through 11-8.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility have storm water discharge not covered by a NPDES permit?	_____	If **YES** see ERGO item 11-9.
4. Does facility discharge to a privately-owned treatment works (POTW)?	_____	If **YES** see ERGO items 11-10 through 11-12.
5. Does facility have any personnel engaged in the operation of water pollution control devices?	_____	If **YES** see ERGO item 11-13.
6. Does facility have a wastewater treatment plant?	_____	If **YES** see ERGO items 11-14 and 11-15.
7. Does facility have electroplating operations?	_____	If **YES** see ERGO item 11-16 through 11-27.
8. Does facility conduct or issue permits for dredging operations?	_____	If **YES** see ERGO items 11-28 through 11-35.
SECTION 12, Water Quality Management:		
1. Does facility perform contaminant monitoring on its water supply? ✓ W P L	✓	If **YES** see ERGO items 12-18 through 12-43.
2. Is facility located near a sole source aquifer?	_____	If **YES** see ERGO item 12-44.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility use surface water or ground water under the influence of surface water for drinking water?	____	If **YES** see ERGO items 12-45 through 48.
4. Does facility have recreational potable water sources?	✓	If **YES** see ERGO item 12-49.
5. Does facility have swimming beaches?	✓	If **YES** see ERGO item 12-50.
6. Does facility have swimming pools?	____	If **YES** see ERGO item 12-51.
7. Do facility's waters support watercraft?	✓	If **YES** see ERGO items 12-52.
8. Is facility authorized to provide emergency drinking water?	____	If **YES** see ERGO item 12-53.

Signature of individual completing this form: T Coen

Date completed: 3/14/93

Ascutney Mt Audubon
P.O. Box 191
Springfield, VT 05156

ERGO

Environmental Review Guide for Operations

PRE-ASSESSMENT ENVIRONMENTAL MANAGEMENT QUESTIONNAIRE

This questionnaire will provide background information necessary to plan and conduct an environmental compliance assessment.

Name of Facility: NORTH SPRINGFIELD DAM
SPRINGWEATHER NATURE AREA

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 1, Air Emissions Management:		
1. Does facility operate a fuel burner (central steam plant, or hot water or hot water steam boiler)?	NO	If YES see ERGO items 1-4 through 1-15.
2. Does facility operate an incinerator?	NO	If YES see ERGO items 1-16 through 1-18.
3. Does facility dispense, store, or transfer gasoline?	NO	If YES see ERGO items 1-19 through 1-23.
4. Does facility have volatile organic compounds (VOCs)(generally, but not exclusively, found in solvents)?	NO	If YES see ERGO items 1-24 through 1-28.
5. Does facility have fugitive emissions from volatile hazardous air pollutant (VHAP) equipment?	NO	If YES see ERGO items 1-29 through 1-35.
6. Does facility use VOC-based solvent degreasers?	NO	If YES see ERGO item 1-36.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 2, Cultural and Historic Resources Management:		
1. Does the facility have any properties under its jurisdiction?	NO	If YES see ERGO items 2-4 through 2-10.
2. Does the facility have cultural resources? List the facility's cultural resources below:	NO	If YES see ERGO items 2-11 through 2-14.
_____		
_____		
_____		
a. Are the facility's master plan or operational management plan (OMP) public documents?	NO	If YES see ERGO item 2-13.
3. Does the facility have an operational project?	NO	If YES see ERGO item 2-15.
4. Does the facility have any Native American graves or artifacts, or have any been discovered during an operation?	NO	If YES see ERGO item 2-16.
5. Does the facility have an archeological or historical collection?	NO	If YES see ERGO items 2-17 through 2-28.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 3, Hazardous Materials Management:		
1. Does the facility store any hazardous materials?	NO	If YES see ERGO items 3-5 through 3-8.
2. Have there been any releases of hazardous substances at the facility?	NO	If YES see ERGO items 3-9 through 3-11.
3. Are there any extremely hazardous substances at the facility?	NO	If YES see ERGO item 3-12 and 3-13.
4. Does the facility: Have extremely hazardous substances in excess of 500 lbs or the threshold planning quantity (see appendix III-1); have hazardous chemicals in excess of 10,000 lbs; or fall under Standard Industrial Classification Codes 20 to 39?	NO	If YES see ERGO item 3-12 and 3-13.
5. Does the facility store compressed gases, flammable/combustibles, or acids?	NO	If YES see ERGO items 3-14 through 3-27.
6. Does the facility transport hazardous material, or offer such materials for transport?	NO	If YES see ERGO items 3-28 through 3-31.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 4, Hazardous Waste Management:		
1. Is facility a generator of hazardous waste?	NO	If YES see ERGO items 4-8 through 4-15.
a. Is facility a small quantity generator?	NO	If YES see ERGO items 4-16 through 4-18.
b. Is facility a very small quantity generator?	NO	If YES see ERGO item 4-19.

Complete this section before proceeding.

Any waste which is not excepted, which is listed in 40 CFR 261, or which exhibits the following characteristics is a hazardous waste:

- Ignitability (flash point <140 F)
- or Corrosivity (pH <2 or >12.5)
- or TCLP Toxicity (for As,Ba,Cd,Cr,Pb,Hg,Se,Ag, and selected pesticides.
- or Reactive. (or CN)

The following are hazardous wastes that may typically be found at a Corps facility:

	CHECK IF USED AT THIS FACILITY	Vol Gen/mo lb.	Vol Gen/mo Kg.	Vol Accum lb.	Vol Accum Kg.
___	* Solvents	___	___	___	___
✓	Liquid Paint	LIMITED - LESS THAN (1) QT PER YR			
___	Paint stripper, remover, or thinner	___	___	___	___
___	Spray paint booth air filters	___	___	___	___
___	Pesticides, Insecticides, Herbicides, etc.	___	___	___	___
___	NBC filters and test kits	___	___	___	___
___	DS2 (diethlene triamine)	___	___	___	___
___	STB (super topical bleach)	___	___	___	___

___	Ordnance, ammunition, explosives & residues	___	___	___	___
___	Battery acid & Caustics (in unserviceable batteries)	___	___	___	___
___	Some pharmaceuticals	___	___	___	___
___	POL Tank Farm fuel system filters	___	___	___	___
___	De-icing solution	___	___	___	___
___	Printing ink, ink solvents and cleaners	___	___	___	___
___	Absorbent materials and soil contaminated with hazardous waste	___	___	___	___
___	Other_____	___	___	___	___
___	Other_____	___	___	___	___
___	Other_____	___	___	___	___
	TOTAL	___	___	___	___

* e.g., Trichlorethane, Methylene, chloride, Tetrachloroethylene, 1,1,1 Trichloroethane, Carbon Tetrachloride, Chlorinated Fluorocarbons, Toluene, MEK, Break-free in liquid form, Mineral Spirits, Xylene

USEPA Generator Designation: ___ Unregulated ___ Small Qty ___ Large Qty

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
2. Does facility export/import hazardous waste from/to the United States?	NO	If YES see ERGO items 4-23 through 4-31.
3. Does facility transport hazardous waste?	NO	If YES see ERGO items 4-32 through 4-37.
4. Does facility have a treatment, storage, or disposal facility (TSDF)?	NO	If YES see ERGO items 4-38 through 4-74.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
a. Does the TSD facility receive waste from a foreign source?	NO	If **YES** see ERGO item 4-42.
b. Does facility receive waste from off-site sources?	NO	If **YES** see ERGO items 4-46 and 4-47.
c. Does facility handle ignitable, reactive, or incompatible wastes?	NO	If **YES** see ERGO item 4-65 and 4-67.
5. Does facility have hazardous waste containers?	NO	If **YES** see ERGO items 4-75 through 4-86.
6. Does facility store hazardous wastes in tanks?	NO	If **YES** see ERGO items 4-87 through 4-101.
7. Does facility use surface impoundment as a means of treatment, storage, or disposal of hazardous wastes?	NO	If **YES** see ERGO items 4-102 through 4-110.
8. Does facility have waste piles?	NO	If **YES** see ERGO items 4-111 through 4-118.
9. Does facility have land treatment of hazardous waste?	NO	If **YES** see ERGO items 4-119 through 4-126.
10. Does facility have hazardous waste in landfills?	NO	If **YES** see ERGO items 4-127 through 4-137.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
11. Does facility incinerate hazardous waste?	NO	If YES see ERGO items 4-138 through 4-147.
12. Does facility dispose of hazardous waste in miscellaneous units?	NO	If YES see ERGO items 4-148 and 4-149.
13. Does facility have thermal treatment facilities?	NO	If YES see ERGO items 4-150 through 4-152.
14. Does facility have chemical, physical, or biological treatment facilities?	NO	If YES see ERGO items 4-153 through 4-155.
15. Does facility have restricted wastes?	NO	If YES see ERGO items 4-156 through 4-168.

SECTION 5, Natural Resources Management:

1. Does facility have any construction projects?	NO	If YES see ERGO item 5-4.
2. Does facility have land management responsibilities?	YES	If YES see ERGO items 5-7 and 5-8.
3. Does facility have floodplains or wetlands?	YES	If YES see ERGO item 5-9.
4. Does facility contain a shoreline?	YES	If YES see ERGO item 5-12.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
5. Does facility have endangered or threatened species?	OCCASIONALLY	If YES see ERGO items 5-13 and 5-14.

SECTION 6, Pesticides Management:

1. Do facility personnel engage in the application of pesticides?	NO	If YES see ERGO items 6-7 through 6-16.
2. Does facility store, mix, or formulate pesticides?	NO	If YES see ERGO items 6-17 through 6-28.
a. Does facility store/use pesticides classified highly toxic or moderately toxic (bearing DANGER, POISON, WARNING, or the skull and crossbones symbol)?	NO	If YES see ERGO items 6-20 through 6-27.
3. Does facility dispose of pesticides?	NO	If YES see ERGO items 6-29 through 6-33.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 7, Petroleum, Oil and Lubricant (POL) Management:		
1. Does the facility store, transport, or dispense petroleum products?	NO	If **YES** see ERGO items 7-5 through 7-12.
2. Have there been any discharges of oil at the facility?	NO	If **YES** see ERGO items 7-13 through 7-14.
3. Does the facility have any bulk storage tanks over 660 gallons?	NO	If **YES,** see ERGO item 7-16.
4. Does the facility use dikes as a means of containment for petroleum storage tanks?	NO	If **YES** see ERGO items 7-17 and 7-18.
5. Does the facility have any pipelines?	NO	If **YES** see ERGO items 7-20 through 7-22.
6. Does the facility sell used oil?	NO	If **YES,** see ERGO item 7-23.
SECTION 8, Solid Waste Management:		
1. Does the facility collect or store solid waste on site?	NO	If **YES,** see ERGO items 8-4 through 8-12.
2. All Corps facilities must should recycle and reduce solid waste.	WE DO IF POSSIBLE	See ERGO item 8-13.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
a. Does facility have over 100 office workers?	NO	If YES see ERGO item 8-14.
b. Do more than 500 families reside at the facility?	NO	If YES see ERGO item 8-15.
c. Does the facility generate waste corrugated containers?	NO	If YES see ERGO item 8-16.
3. Does facility have land disposal on site?	NO	If YES see ERGO items 8-17 through 8-31.
a. Does facility dispose of water treatment plant sludges?	NO	If YES see ERGO 8-18.
b. Does facility dispose of incinerator or air pollution control residues?	NO	If YES see ERGO item 8-19.
c. Does the facility accept special wastes?	NO	If YES see ERGO item 8-21.
4. Does the facility have a closure site?	NO	If YES, see ERGO items 8-32 and 8-33.
5. Does the facility have a new landfill site?	NO	If YES, see ERGO items 8-34 and 8-35.
6. Does facility have a thermal processing facility?	NO	If YES see ERGO items 8-36 through 8-49.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
7. Does the facility utilize resource recovery facilities?	NO	If YES see ERGO items 8-50 and 8-51.
a. If the facility does **NOT** utilize resource recovery facilities, a report must be filed with the Administrator explaining the decision not to utilize.	?	See ERGO item 8-50.
SECTION 9, Special Pollutants Management:		
1. Does facility have PCBs of any kind?	NO	If YES, see ERGO items 9-4 through 9-11.
a. Does facility have a PCB waste landfill?	NO	If YES, see ERGO item 9-10.
b. Does facility have PCB storage or disposal facilities?	NO	If YES, see ERGO item 9-11.
2. Does facility have PCB transformers?	NO	If YES, see ERGO items 9-12 through 9-18.
3. Has facility had a PCB spill?	NO	If YES see ERGO item 9-19.
4. Does facility have PCB Items (PCB-contaminated heat transfer or hydraulic systems, electromagnets, switches, voltage regulators, capacitors, circuit breakers, reclosers, or cables)?	NO	If YES see ERGO items 9-20 through 9-23.
5. Does facility use PCBs in research?	NO	If YES see ERGO item 9-24.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
6. Does facility store PCBs?	NO	If YES see ERGO items 9-25 through 9-29.
7. Does facility transport PCBs or PCB Items?	NO	If YES see ERGO items 9-30 and 9-31.
8. Does facility dispose of PCBs or PCB Items?	NO	If YES see ERGO items 9-32 through 9-41.
9. Does facility demolish, renovate, or strip components from structures containing friable asbestos?	NO	If YES see ERGO items 9-42 through 9-52.
10. Does facility dispose, or transport for disposal, asbestos or asbestos-containing waste?	NO	If YES see ERGO items 9-53 through 9-57.
11. Is facility located in an area with a potential radon problem?	?	If YES see ERGO items 9-58 through 9-60.
12. Does facility have any possible sources of noise pollution, or have a noise hazardous area?	NO	If YES see ERGO items 9-61 through 9-68.

SECTION 10, Underground Storage Tanks (USTs) Management:

1. Does facility have organizational fuel tanks?	NO	If YES see ERGO item 10-5.
2. Has facility repaired, or is it planning to repair, a UST?	NO	If YES see ERGO item 10-10.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility have hazardous waste USTs?	NO	If YES see ERGO item 10-19.
4. Does facility have a deferred UST?	NO	If YES see ERGO item 10-20.
5. Does facility have a metallic UST?	NO	If YES see ERGO items 10-23 and 10-35.
6. Does facility have newly-installed USTs (i.e., after May, 1986)?	NO	If YES see ERGO items 10-24 through 10-27.
7. Have facility USTs undergone a change of service, or closure?	NO	If YES see ERGO items 10-28 through 10-34.
8. Does facility have substandard USTs?	NO	If YES see ERGO item 10-35.

SECTION 11, Wastewater Management:

1. Does facility have a floating plant?	NO	If YES see ERGO item 11-4.
2. Does facility have any point source discharges, or does facility have domestic sewage treatment plants?	YES (i) OUT HOUSE	If YES see ERGO items 11-5 through 11-8.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility have storm water discharge not covered by a NPDES permit?	YES	If YES see ERGO item 11-9.
4. Does facility discharge to a privately-owned treatment works (POTW)?	NO	If YES see ERGO items 11-10 through 11-12.
5. Does facility have any personnel engaged in the operation of water pollution control devices?	NO	If YES see ERGO item 11-13.
6. Does facility have a wastewater treatment plant?	NO	If YES see ERGO items 11-14 and 11-15.
7. Does facility have electroplating operations?	NO	If YES see ERGO item 11-16 through 11-27.
8. Does facility conduct or issue permits for dredging operations?	NO	If YES see ERGO items 11-28 through 11-35.
SECTION 12, Water Quality Management:		
1. Does facility perform contaminant monitoring on its water supply?	NO	If YES see ERGO items 12-18 through 12-43.
2. Is facility located near a sole source aquifer?	NO	If YES see ERGO item 12-44.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility use surface water or ground water under the influence of surface water for drinking water?	NO	If YES see ERGO items 12-45 through 48.
4. Does facility have recreational potable water sources?	NO	If YES see ERGO item 12-49.
5. Does facility have swimming beaches?	NO	If YES see ERGO item 12-50.
6. Does facility have swimming pools?	NO	If YES see ERGO item 12-51.
7. Do facility's waters support watercraft?	YES	If YES see ERGO items 12-52.
8. Is facility authorized to provide emergency drinking water?	NO	If YES see ERGO item 12-53.

Signature of individual completing this form: Hugh S. Putnam for Ascutney Mt Audubon
P.O. Box 191
Springfield, VT 05156

Date completed: 4/24/93

I have assumed that my response is limited to Springweather Nature area leased lands. We have drainage through the facility and (1) out house but no known sources of pollutants.

On occasion we have been visited by endangered or threatened species of birds but no known nesting or permanent resident.

HSP

ERGO

Environmental Review Guide for Operations

PRE-ASSESSMENT ENVIRONMENTAL MANAGEMENT QUESTIONNAIRE

This questionnaire will provide background information necessary to plan and conduct an environmental compliance assessment.

Name of Facility: NORTH SPRINGFIELD LAKE - VT STATE PARKS LEASE

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 1, Air Emissions Management:		
1. Does facility operate a fuel burner (central steam plant, or hot water or hot water steam boiler)?	NO	If YES see ERGO items 1-4 through 1-15.
2. Does facility operate an incinerator?	NO	If YES see ERGO items 1-16 through 1-18.
3. Does facility dispense, store, or transfer gasoline?	NO	If YES see ERGO items 1-19 through 1-23.
4. Does facility have volatile organic compounds (VOCs)(generally, but not exclusively, found in solvents)?	NO	If YES see ERGO items 1-24 through 1-28.
5. Does facility have fugitive emissions from volatile hazardous air pollutant (VHAP) equipment?	NO	If YES see ERGO items 1-29 through 1-35.
6. Does facility use VOC-based solvent degreasers?	NO	If YES see ERGO item 1-36.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 2, Cultural and Historic Resources Management:		
1. Does the facility have any properties under its jurisdiction?	NO	If YES see ERGO items 2-4 through 2-10.
2. Does the facility have cultural resources? List the facility's cultural resources below:	YES	If YES see ERGO items 2-11 through 2-14.
STONE WALLS		
a. Are the facility's master plan or operational management plan (OMP) public documents? LONG RANGE MANAGEMENT PLAN BEING DRAFTED	YES	If YES see ERGO item 2-13.
3. Does the facility have an operational project?	NO	If YES see ERGO item 2-15.
4. Does the facility have any Native American graves or artifacts, or have any been discovered during an operation?	NO	If YES see ERGO item 2-16.
5. Does the facility have an archeological or historical collection?	NO	If YES see ERGO items 2-17 through 2-28.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 3, Hazardous Materials Management:		
1. Does the facility store any hazardous materials?	NO	If YES see ERGO items 3-5 through 3-8.
2. Have there been any releases of hazardous substances at the facility?	NO	If YES see ERGO items 3-9 through 3-11.
3. Are there any extremely hazardous substances at the facility?	NO	If YES see ERGO item 3-12 and 3-13.
4. Does the facility: Have extremely hazardous substances in excess of 500 lbs or the threshold planning quantity (see appendix III-1); have hazardous chemicals in excess of 10,000 lbs; or fall under Standard Industrial Classification Codes 20 to 39?	NO	If YES see ERGO item 3-12 and 3-13.
5. Does the facility store compressed gases, flammable/combustibles, or acids?	NO	If YES see ERGO items 3-14 through 3-27.
6. Does the facility transport hazardous material, or offer such materials for transport?	NO	If YES see ERGO items 3-28 through 3-31.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 4, Hazardous Waste Management:		
1. Is facility a generator of hazardous waste?	NO	If YES see ERGO items 4-8 through 4-15.
a. Is facility a small quantity generator?	NO	If YES see ERGO items 4-16 through 4-18.
b. Is facility a very small quantity generator?	NO	If YES see ERGO item 4-19.

Complete this section before proceeding.

Any waste which is not excepted, which is listed in 40 CFR 261, or which exhibits the following characteristics is a hazardous waste:

- Ignitability (flash point <140 F)
- or Corrosivity (pH <2 or >12.5)
- or TCLP Toxicity (for As,Ba,Cd,Cr,Pb,Hg,Se,Ag, and selected pesticides.
- or Reactive. (or CN)

The following are hazardous wastes that may typically be found at a Corps facility:

	CHECK IF USED AT THIS FACILITY	Vol Gen/mo lb.	Vol Gen/mo Kg.	Vol Accum lb.	Vol Accum Kg.
___	* Solvents	___	___	___	___
___	Liquid Paint	___	___	___	___
___	Paint stripper, remover, or thinner	___	___	___	___
___	Spray paint booth air filters	___	___	___	___
___	Pesticides, Insecticides, Herbicides, etc.	___	___	___	___
___	NBC filters and test kits	___	___	___	___
___	DS2 (diethlene triamine)	___	___	___	___
___	STB (super topical bleach)	___	___	___	___

___	Ordnance, ammunition, explosives & residues	___	___	___	___
___	Battery acid & Caustics (in unserviceable batteries)	___	___	___	___
___	Some pharmaceuticals	___	___	___	___
___	POL Tank Farm fuel system filters	___	___	___	___
___	De-icing solution	___	___	___	___
___	Printing ink, ink solvents and cleaners	___	___	___	___
___	Absorbent materials and soil contaminated with hazardous waste	___	___	___	___
___	Other_____	___	___	___	___
___	Other_____	___	___	___	___
___	Other_____	___	___	___	___
	TOTAL	___	___	___	___

* e.g., Trichlorethane, Methylene, chloride, Tetrachloroethylene, 1,1,1 Trichloroethane, Carbon Tetrachloride, Chlorinated Fluorocarbons, Toluene, MEK, Break-free in liquid form, Mineral Spirits, Xylene

USEPA Generator Designation: ___ Unregulated ___ Small Qty ___ Large Qty

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
2. Does facility export/import hazardous waste from/to the United States?	NO	If **YES** see ERGO items 4-23 through 4-31.
3. Does facility transport hazardous waste?	NO	If **YES** see ERGO items 4-32 through 4-37.
4. Does facility have a treatment, storage, or disposal facility (TSDF)?	NO	If **YES** see ERGO items 4-38 through 4-74.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
a. Does the TSD facility receive waste from a foreign source?	NO	If YES see ERGO item 4-42.
b. Does facility receive waste from off-site sources?	NO	If YES see ERGO items 4-46 and 4-47.
c. Does facility handle ignitable, reactive, or incompatible wastes?	NO	If YES see ERGO item 4-65 and 4-67.
5. Does facility have hazardous waste containers?	NO	If YES see ERGO items 4-75 through 4-86.
6. Does facility store hazardous wastes in tanks?	NO	If YES see ERGO items 4-87 through 4-101.
7. Does facility use surface impoundment as a means of treatment, storage, or disposal of hazardous wastes?	NO	If YES see ERGO items 4-102 through 4-110.
8. Does facility have waste piles?	NO	If YES see ERGO items 4-111 through 4-118.
9. Does facility have land treatment of hazardous waste?	NO	If YES see ERGO items 4-119 through 4-126.
10. Does facility have hazardous waste in landfills?	NO	If YES see ERGO items 4-127 through 4-137.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
11. Does facility incinerate hazardous waste?	NO	If YES see ERGO items 4-138 through 4-147.
12. Does facility dispose of hazardous waste in miscellaneous units?	NO	If YES see ERGO items 4-148 and 4-149.
13. Does facility have thermal treatment facilities?	NO	If YES see ERGO items 4-150 through 4-152.
14. Does facility have chemical, physical, or biological treatment facilities?	NO	If YES see ERGO items 4-153 through 4-155.
15. Does facility have restricted wastes?	NO	If YES see ERGO items 4-156 through 4-168.
SECTION 5, Natural Resources Management:		
1. Does facility have any construction projects?	NO	If YES see ERGO item 5-4.
2. Does facility have land management responsibilities?	Yes	If YES see ERGO items 5-7 and 5-8.
3. Does facility have floodplains or wetlands?	Yes	If YES see ERGO item 5-9.
4. Does facility contain a shoreline?	NO	If YES see ERGO item 5-12.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
5. Does facility have endangered or threatened species? Survey Needed	?	If YES see ERGO items 5-13 and 5-14.
SECTION 6, Pesticides Management:		
1. Do facility personnel engage in the application of pesticides?	NO	If YES see ERGO items 6-7 through 6-16.
2. Does facility store, mix, or formulate pesticides?	NO	If YES see ERGO items 6-17 through 6-28.
a. Does facility store/use pesticides classified highly toxic or moderately toxic (bearing DANGER, POISON, WARNING, or the skull and crossbones symbol)?	NO	If YES see ERGO items 6-20 through 6-27.
3. Does facility dispose of pesticides?	NO	If YES see ERGO items 6-29 through 6-33.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
SECTION 7, Petroleum, Oil and Lubricant (POL) Management:		
1. Does the facility store, transport, or dispense petroleum products?	NO	If **YES** see ERGO items 7-5 through 7-12.
2. Have there been any discharges of oil at the facility?	NO	If **YES** see ERGO items 7-13 through 7-14.
3. Does the facility have any bulk storage tanks over 660 gallons?	NO	If **YES,** see ERGO item 7-16.
4. Does the facility use dikes as a means of containment for petroleum storage tanks?	NO	If **YES** see ERGO items 7-17 and 7-18.
5. Does the facility have any pipelines?	NO	If **YES** see ERGO items 7-20 through 7-22.
6. Does the facility sell used oil?	NO	If **YES,** see ERGO item 7-23.
SECTION 8, Solid Waste Management:		
1. Does the facility collect or store solid waste on site? DURING DAY CAMPS - RUBBISH/GARBAGE IS STORED FOR LATER DISPOSAL	Yes	If **YES,** see ERGO items 8-4 through 8-12.
2. All Corps facilities must should recycle and reduce solid waste.	NO	See ERGO item 8-13.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
a. Does facility have over 100 office workers?	NO	If **YES** see ERGO item 8-14.
b. Do more than 500 families reside at the facility?	NO	If **YES** see ERGO item 8-15.
c. Does the facility generate waste corrugated containers?	NO	If **YES** see ERGO item 8-16.
3. Does facility have land disposal on site?	NO	If **YES** see ERGO items 8-17 through 8-31.
a. Does facility dispose of water treatment plant sludges?	NO	If **YES** see ERGO 8-18.
b. Does facility dispose of incinerator or air pollution control residues?	NO	If **YES** see ERGO item 8-19.
c. Does the facility accept special wastes?	NO	If **YES** see ERGO item 8-21.
4. Does the facility have a closure site?	NO	If **YES,** see ERGO items 8-32 and 8-33.
5. Does the facility have a new landfill site?	NO	If **YES,** see ERGO items 8-34 and 8-35.
6. Does facility have a thermal processing facility?	NO	If **YES** see ERGO items 8-36 through 8-49.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
7. Does the facility utilize resource recovery facilities?	NO	If YES see ERGO items 8-50 and 8-51.
a. If the facility does NOT utilize resource recovery facilities, a report must be filed with the Administrator explaining the decision not to utilize. NOT Available	____	See ERGO item 8-50.

SECTION 9, Special Pollutants Management:

1. Does facility have PCBs of any kind?	NO	If YES, see ERGO items 9-4 through 9-11.
a. Does facility have a PCB waste landfill?	NO	If YES, see ERGO item 9-10.
b. Does facility have PCB storage or disposal facilities?	NO	If YES, see ERGO item 9-11.
2. Does facility have PCB transformers?	NO	If YES, see ERGO items 9-12 through 9-18.
3. Has facility had a PCB spill?	NO	If YES see ERGO item 9-19.
4. Does facility have PCB Items (PCB-contaminated heat transfer or hydraulic systems, electromagnets, switches, voltage regulators, capacitors, circuit breakers, reclosers, or cables)?	NO	If YES see ERGO items 9-20 through 9-23.
5. Does facility use PCBs in research?	NO	If YES see ERGO item 9-24.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
6. Does facility store PCBs?	NO	If **YES** see ERGO items 9-25 through 9-29.
7. Does facility transport PCBs or PCB Items?	NO	If **YES** see ERGO items 9-30 and 9-31.
8. Does facility dispose of PCBs or PCB Items?	NO	If **YES** see ERGO items 9-32 through 9-41.
9. Does facility demolish, renovate, or strip components from structures containing friable asbestos?	NO	If **YES** see ERGO items 9-42 through 9-52.
10. Does facility dispose, or transport for disposal, asbestos or asbestos-containing waste?	NO	If **YES** see ERGO items 9-53 through 9-57.
11. Is facility located in an area with a potential radon problem?	NO	If **YES** see ERGO items 9-58 through 9-60.
12. Does facility have any possible sources of noise pollution, or have a noise hazardous area?	NO	If **YES** see ERGO items 9-61 through 9-68.
SECTION 10, Underground Storage Tanks (USTs) Management:		
1. Does facility have organizational fuel tanks?	NO	If **YES** see ERGO item 10-5.
2. Has facility repaired, or is it planning to repair, a UST?	NO	If **YES** see ERGO item 10-10.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility have hazardous waste USTs?	NO	If YES see ERGO item 10-19.
4. Does facility have a deferred UST?	NO	If YES see ERGO item 10-20.
5. Does facility have a metallic UST?	NO	If YES see ERGO items 10-23 and 10-35.
6. Does facility have newly-installed USTs (i.e., after May, 1986)?	NO	If YES see ERGO items 10-24 through 10-27.
7. Have facility USTs undergone a change of service, or closure?	NO	If YES see ERGO items 10-28 through 10-34.
8. Does facility have substandard USTs?	NO	If YES see ERGO item 10-35.

SECTION 11, Wastewater Management:

1. Does facility have a floating plant?	NO	If YES see ERGO item 11-4.
2. Does facility have any point source discharges, or does facility have domestic sewage treatment plants?	NO	If YES see ERGO items 11-5 through 11-8.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility have storm water discharge not covered by a NPDES permit?	NO	If **YES** see ERGO item 11-9.
4. Does facility discharge to a privately-owned treatment works (POTW)?	NO	If **YES** see ERGO items 11-10 through 11-12.
5. Does facility have any personnel engaged in the operation of water pollution control devices?	NO	If **YES** see ERGO item 11-13.
6. Does facility have a wastewater treatment plant?	NO	If **YES** see ERGO items 11-14 and 11-15.
7. Does facility have electroplating operations?	NO	If **YES** see ERGO item 11-16 through 11-27.
8. Does facility conduct or issue permits for dredging operations?	NO	If **YES** see ERGO items 11-28 through 11-35.

SECTION 12, Water Quality Management:

1. Does facility perform contaminant monitoring on its water supply? POTABLE water TRUCKED IN FOR DAY CAMP	NO	If **YES** see ERGO items 12-18 through 12-43.
2. Is facility located near a sole source aquifer?	NO	If **YES** see ERGO item 12-44.

QUESTION/DESCRIPTION	RESPONSE	REFERENCE
3. Does facility use surface water or ground water under the influence of surface water for drinking water?	NO	If **YES** see ERGO items 12-45 through 48.
4. Does facility have recreational potable water sources?	NO	If **YES** see ERGO item 12-49.
5. Does facility have swimming beaches?	NO	If **YES** see ERGO item 12-50.
6. Does facility have swimming pools?	NO	If **YES** see ERGO item 12-51.
7. Do facility's waters support watercraft?	NO	If **YES** see ERGO items 12-52.
8. Is facility authorized to provide emergency drinking water?	NO	If **YES** see ERGO item 12-53.

Signature of individual completing this form: Allen D. Hostetler

Date completed: 5-03-93

Appendix B

CENED-OD-P 12 June 1992

MEMORANDUM FOR NED Executive Staff

SUBJECT: NED Environmental Compliance Coordinator

1. In January 1991, John Elmore, Chief, Operations, Construction and Readiness Division, directed division and district operations offices to formally designate Environmental Compliance Coordinators (ECC's). The Director of Operations designated Bruce Williams, Project Operations and Readiness Division as the New England Division ECC.

2. In a follow-up memo dated 31 March 1992, The Director of Civil Works expanded the role of the Environmental Compliance Coordinators to be utilized as division or district environmental coordinators. This is a coordination, as opposed to an operative assignment. The ECC's will support rather than assume environmental compliance responsibilities of the various functional elements (Planning, Engineering, Project Program Management, Logistics, Safety and Occupational Health, and Real Estate, etc.).

3. The Corps of Engineer objective is to develop and maintain a comprehensive and consistent environmental compliance program utilizing the existing Operations "stovepipe", since Operations is responsible for the majority of Corps facilities. In the future, the ECC should be included in the review process of programs or projects that involve environmental compliance as part of the construction, operation or maintenance activities at Corps owned or operated facilities and projects.

4. As a part of the USACE Facilities Environmental Compliance Program, the Director of Civil Works recommended that Commanders should also establish and chair an interdisciplinary Environmental Compliance Steering Committee with representatives from the various affected offices throughout NED. Rather than develop parallel organizations performing the same function, I am tasking the NED Executive Staff to serve an additional function as the Environmental Compliance Steering Committee. The Director of Operations will provide direction and oversight to the ECC and overall coordination with NED Executive Staff.

JAMES K. HUGHES
LTC, EN
Commanding

cf:
Distribution "A"
Bruce Williams ECC

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO ATTENTION OF:

28 MAR 1992

CECW-OA

S: 31 March 1992

MEMORANDUM FOR COMMANDERS, ALL MAJOR SUBORDINATE COMMANDS, DISTRICT COMMANDS, AND LABORATORIES

SUBJECT: USACE Facilities Environmental Compliance

1. In June 1991, Lieutenant General H. J. Hatch, Chief of Engineers, assigned me the mission of assuring that all USACE facilities and associated lands meet environmental standards contained in relevant Federal, DoD, Army, state, and local laws and regulations. In an effort to ensure USACE facilities environmental compliance, commanders are directed to initiate an environmental assessment/deficiency correction program for all Corps property utilizing the Environmental Review Guide for Operations (ERGO). Our overall goal is to complete environmental assessments and develop corrective action plans at all Corps projects and facilities by the end of FY94.

2. ERGO is a checklist of environmental laws and regulations, good management practices, and risk management issues. ERGO was designed as a self assessment tool, but can also be used for formal, or external assessments. Project and facility managers, with technical assistance from district elements, state authorities or private sector contractors, can use ERGO to determine if their operations are being conducted in accordance with environmental laws and regulations. ERGO assessments are a proactive approach to environmental compliance and protection. Findings identified in ERGO assessments should be prioritized and remediation measures performed as routine maintenance work or programmed in the budget process.

3. Civil Works Operations elements are already implementing ERGO, with a goal of completing ERGO assessments at 25 percent of Corps O&M General funded operating projects and facilities this FY. I now ask that you schedule and conduct ERGO assessments at facilities and projects operated with other than O&M General funds (e.g. Mississippi River and Tributaries funded projects, district motor pools, regional warehouses, Corps operated printing plants and photo labs, etc.).

4. ERGO was initially developed for use at operating projects. Since we are now expanding its application, you may find that some refinement is required to thoroughly assess facilities not considered when preparing the current manual. Contact Dr. Diane Mann of CERL-ENM at (217) 373-6741, for help in dealing with facilities and regulations not currently covered in the manual.

CECW-ON
SUBJECT: USACE Facilities Environmental Compliance

Recommendations for improving the checklist can be directed to Dr. Mann at Department of the Army, Construction Engineering Research Laboratory, Corps of Engineers, P.O. Box 9005, Champaign, Illinois 61826-9005. From efficiency and comparative standpoints we are committed to using a single environmental compliance protocol throughout USACE.

5. I encourage all elements to take a teamwork approach, using existing expertise, rather than developing parallel organizations performing the same function, to initiate, develop, and maintain environmental compliance and assurance at all USACE operated and funded projects, facilities, and activities. This teamwork approach will minimize duplicating effort and assessment costs. Commanders, if they have not already done so, should also establish and chair an interdisciplinary Environmental Compliance Steering Committee with representatives from the various affected offices throughout your organization. The steering committee will provide direction and oversight.

6. In January 1991, John Elmore, Chief, Operations, Construction and Readiness Division, directed division and district operations offices to formally designate Environmental Compliance Coordinators (ECCs). Hereafter, these coordinators will be utilized as division or district environmental compliance coordinators. This is a coordination, as opposed to an operative, assignment. The ECCs will support rather than assume environmental compliance responsibilities of the various functional elements (Planning, Engineering, Project Program Management, Logistics, Safety and Occupation Health, and Real Estate). Our objective is to develop and maintain a comprehensive and consistent environmental compliance program, utilizing the existing Operations "stovepipe", since Operations is responsible for the majority of USACE facilities.

7. We will distribute revised ERGO manuals and follow on compliance materials to each currently designated division and district ECC for dissemination to offices involved in environmental compliance throughout your organization. If there are any updates to the current list of ECCs, please forward their name, office symbol, FTS and commercial telephone numbers, Fax number, and Corps Mail I.D. to CECW-OA, ATTN: Jim Wolcott, by 31 March 1992. Field Operating Activities and Laboratories should also designate and provide information on ECCs.

FOR THE COMMANDER:

Arthur E. Williams

ARTHUR E. WILLIAMS
Major General, USA
Director of Civil Works

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

06 NOV 1991

REPLY TO
ATTENTION OF:

CECW-ON (1130-2-2)

MEMORANDUM FOR COMMANDERS, ALL MAJOR SUBORDINATE COMMANDS, DISTRICT COMMANDS, FIELD OPERATING ACTIVITIES AND LABORATORIES

SUBJECT: USACE Facilities Environmental Compliance Program (Internal)

1. I recently reassigned the mission of assuring that all USACE facilities and associated lands meet environmental standards contained in relevant Federal, DoD, Army, state, and local laws and regulations to the Director of Civil Works. This action is in response to your comments regarding implementing an environmental compliance initiative within USACE.

2. Program oversight will be provided by a steering committee chaired by the Deputy Director of Civil Works, with Logistics, Military Programs, Office of Counsel, Real Estate, Research and Development, Safety and Occupational Health and the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) represented. An Environmental Compliance Branch within Operations, Construction and Readiness Division will develop, coordinate, and manage the program. Civil Works will provide further details as the USACE Facilities Environmental Compliance Program unfolds.

3. The Corps has an ethical and legal obligation to protect our environment through prevention, compliance, restoration and stewardship. We are counting on your support and enthusiasm, coupled with the evolving USACE Facilities Environmental Compliance Program, to demonstrate our commitment to, and capabilities in, environmental protection.

H. J. HATCH
Lieutenant General, USA
Commanding

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

S: 15 February 1991

CECW-ON

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS AND DISTRICT COMMANDS

SUBJECT: Environmental Review Guide for Operations (ERGO)

1. I am enclosing the Environmental Review Guide for Operations (ERGO), a checklist for analyzing compliance with environmental laws and regulations at our operating projects. Copies are being sent to all District Operations offices for distribution to projects. We are releasing ERGO as a test document for use during the remainder of FY 91. An implementation workshop is in the planning stage. Specifics will be provided later.

2. Lieutenant General Hatch, in his 14 February 1990 letter, "Strategic Direction for Environmental Engineering", echoed Secretary Cheney's call for DOD to be the "Federal leader in environmental compliance and protection." ERGO is a pro-active approach to compliance.

3. The Construction Engineering Research Laboratory developed ERGO. A steering committee with Division, District and project members from Operations elements provided guidance and direction. Their goal was to produce a self-assessment tool for managers of operating projects with District teams, State agencies, contractors and the United States Army Toxic and Hazardous Waste Agency as potential sources of support.

4. Environmental compliance is a legal and ethical responsibility, an integral part of doing business. I ask that you apply ERGO at one or more projects in each District this FY.

5. We will need feedback to update ERGO for full implementation in FY 92. Every Division and District Operations office should formally designate an environmental compliance coordinator. These individuals will be our POCs regarding ERGO and other environmental matters. They will act as liaisons with the various functional areas within Operations organizations, and with POCs from other elements with environmental responsibilities. Please forward the names, office symbols, and telephone numbers of your Division and District environmental compliance coordinators to CECW-ON, ATTN: Jim Wolcott by 15 February 1991.

FOR THE DIRECTOR OF CIVIL WORKS:

JOHN P. ELMORE
Chief, Operations, Construction and
Readiness Division
Directorate of Civil Works

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

DEC 1991

10 January 1992

CECW-ON

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS

SUBJECT: FY 92 Environmental Assessments at Operating Projects

1. As managers of over 400 water resources projects and stewards of 11.7 million acres of land and water, we individually and corporately have an ethical and legal responsibility to protect the environment. Your positive response to the Environmental Review Guide for Operations (ERGO) we distributed last January is appreciated. We are now ready to proceed with an organization-wide series of ERGO assessments. The FY 92 target is to complete ERGO assessments at 25 percent of our O&M General funded operating projects and facilities. The remainder will be assessed within the following two years. Assessments of facilities and projects operated with other than O&M General funds will be addressed by separate memorandum.

2. As an indication of the importance of this effort, we are providing dedicated O&M funding from headquarters to insure that these assessments are completed. Enclosed is a list of funds available for allocation to each division. These funds are for conducting assessments and converting findings into corrective action plans. Corrective actions are to be implemented through routine budgeting and reprogramming procedures. We ask that you respond with a list of projects, by district, at which ERGO evaluations will be conducted in FY 92, and the portion of your division's total allocation we should distribute to each project on your list. Include the CWIS number with each project you identify. Please respond to Denise White of our Natural Resources Management Branch (CECW-ON) by 10 January 1992.

3. In selecting projects and facilities for FY 92 assessments, we recommend that you concentrate on locations having the greatest potential for significant compliance shortfalls. When evaluating projects, evaluate all functions (hydropower, recreation, etc.) at the same time, to obtain comprehensive project assessments and action plans.

4. Our overall FY 92 budget for ERGO assessments is based on an estimated average cost of $13K per project. To contain costs, use ERGO in conjunction with the representative sampling techniques presented at the Kansas City and Dallas ERGO orientation sessions.

Contact Dr. Diane Mann of Construction Engineering Research Laboratory (CERL) at 217-373-6741 for help in designing representative sampling formats.

5. ERGO was developed as a self-assessment tool for managers of operating projects, with district teams, state agencies, and contractors as potential sources of support. Because of the complexity of the laws and regulations, several respondents from the FY 91 effort commented on the benefits of inter disciplinary teams, including representation from offices such as Engineering, Logistics, Planning, Real Estate, and Safety and Occupational Health. While we are not specifying the way this first round of assessments is to be conducted, we are requiring the involvement, to the extent possible, of personnel from the project or facility being assessed to maximize training benefits. We are also emphasizing quality products that will withstand independent scrutiny.

6. Real Estate is responsible for reviewing user compliance with real estate instrument provisions, and reviewing environmental compliance clauses in such outgrants. ERGO is designed to apply to operating projects and facilities, including outgrants. We understand that in some locations the concept of applying ERGO to outgrants and concessions is surfacing unanticipated issues. Outgrant related issues will be addressed at the joint Real Estate/Natural Resources Meeting scheduled for January 1992. Please be sure that your representatives come to that meeting with complete and current information, both positive and negative. More specific guidance will be issued following that meeting.

7. In January 1992, we will distribute an updated ERGO manual reflecting FY 91 user feedback and incorporating new and revised laws and regulations. As you proceed with ERGO assessments in FY 92, it is especially important that you record "lessons learned" and track costs per assessment, including report and action plan development costs.

8. In support of our commitment to promote environmental compliance at all levels and functions, we have tasked CERL with developing and conducting ERGO orientation programs at our districts during the FY 92/93 time frame. A video based ERGO training course has also been approved for development by Huntsville Division. Additional information will be provided as these projects progress.

CECW-ON
SUBJECT: FY 92 Environmental Assessments at Operating Projects

3. Periodic EAOO assessments are the foundation of [illegible] mental compliance program and your comments and recommendations are welcome at any time. They can be directed to Denise White at 202-272-0794.

FOR THE DIRECTOR OF CIVIL WORKS:

Encl

JOHN P. ELMORE, P.E.
Chief, Operations, Construction
and Readiness Division
Directorate of Civil Works

ENVIRONMENTAL REVIEW GUIDE FOR OPERATIONS (ERGO)

FISCAL YEAR 92 BUDGET DISTRIBUTION

The following is a listing of funding distribution in thousands of dollars to division offices for performing ERGO assessments. NOTE: Construction General (CG) and Mississippi River and Tributaries (MR&T) funded projects were not considered.

Division	Amount
LMD	145.0
MRD	105.0
NAD	95.0
NCD	210.0
NED	105.0
NPD	130.0
ORD	455.0
SAD	185.0
SPD	65.0
SWD	430.0
TOTAL	1,925.0

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
KINGMAN BUILDING
FORT BELVOIR, VA 22060-

REPLY TO
ATTENTION OF:

CEIG-I (20-1g)

17 DEC 1991

MEMORANDUM FOR ALL DISTRICT AND DIVISION COMMANDERS

SUBJECT: Environmental Compliance Concerns Within USACE

1. Earlier this year my office completed a systemic inspection of environmental compliance on lands controlled by USACE. A copy of this report has been recently distributed to your command and should be reviewed by you and members of your staff. We reported to the Chief that compliance problems exist across USACE with the many Federal, State and local environmental laws. We found at HQUSACE, and throughout the Corps:

a. Organizational confusion as to who was in charge of environmental compliance.

b. Lack of comprehensive guidance.

c. Lack of Corps-wide policy on disposal of our hazardous materials and hazardous waste.

d. Training shortfalls.

e. Inadequate environmental assessment/inspection on lands we control.

f. Failure to program resources to insure environmental compliance.

g. Problems with environmental compliance on Corps lands leased to others for use.

h. Unfulfilled commitments to mitigate environmental impact on many Corps projects.

2. Our inspection teams visited fourteen districts in eight divisions and a laboratory. Inspectors physically toured over 240 different sites. They found compliance issues at virtually every site visited. Enclosed are pictures of typical findings.

3. I would like to emphasize that the situations shown in the pictures are typical and were not found at only one location or in any one particular district. Rather, they are likely to exist at any site or possibly at every site. I urge you and your staff to make it a special point to visit all land under your jurisdiction, especially lands leased and outgranted to others, with a keen eye to discover any environmental compliance

violations or problems. You then need to follow through and insure resources are programed and dedicated to correct these problems in a timely fashion.

4. The U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) is available to answer environmental questions at 1-800 USA EVHL. My POC for this action is LTC Dan Shuey or LTC Fred Streb at Commercial (703)355-3575 or DSN 345-3575.

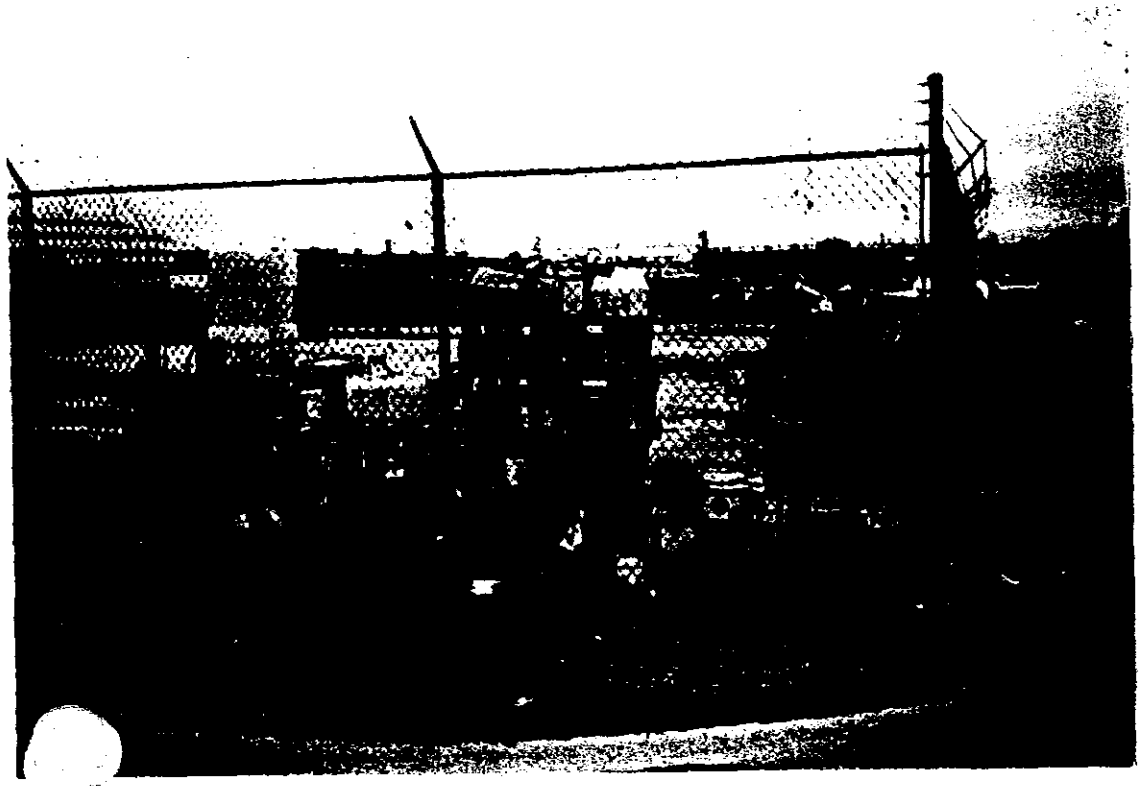
FOR THE COMMANDER:

GERALD M. TIPPINS
Colonel, IE
The Engineer Inspector General

Encl

CF:
CECER
CECRL
CETEC
CEWES
CEHSC
CETHA
CECW-ZA (MG Williams)
CECW-O (Mr. Elmore

ENVIRONMENTAL INSPECTION PHOTOGRAPHS



Photograph 1

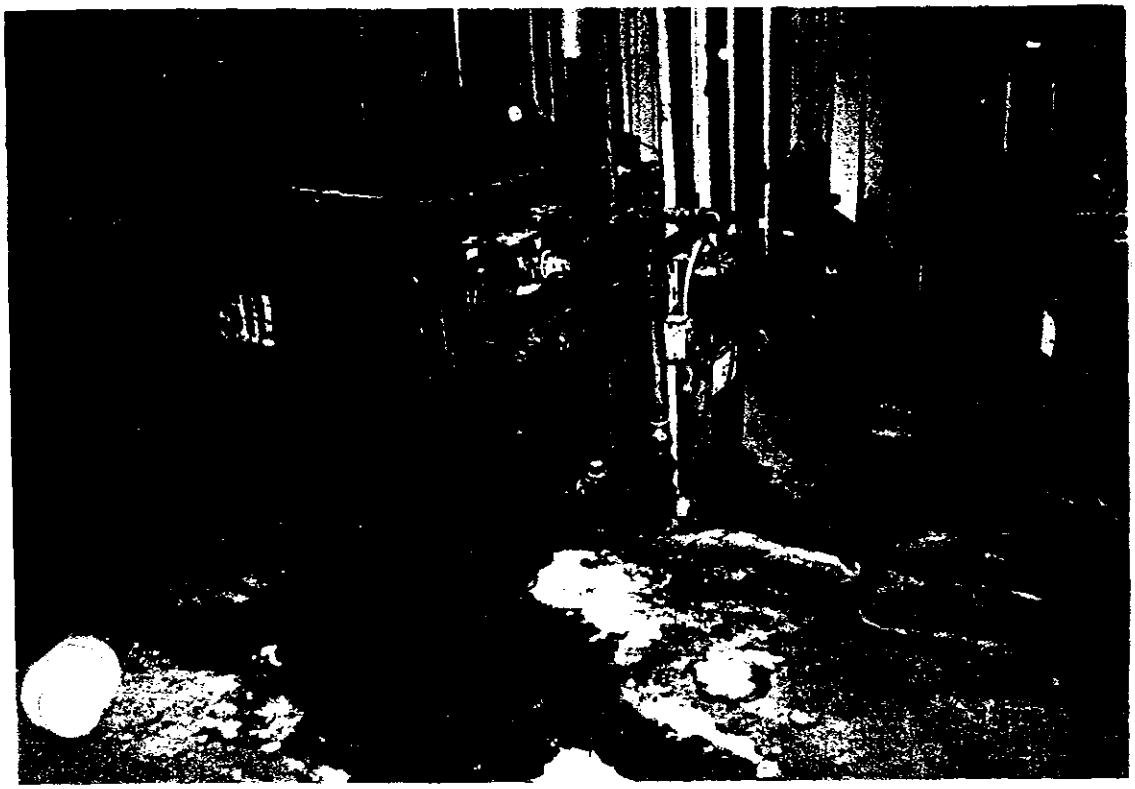
Storage Area

Area of Concern:

1. Violation of RCRA, CERCLA, and TSCA

2. Soil Contamination

3. Improper storage/disposal of HTW



Photograph 2

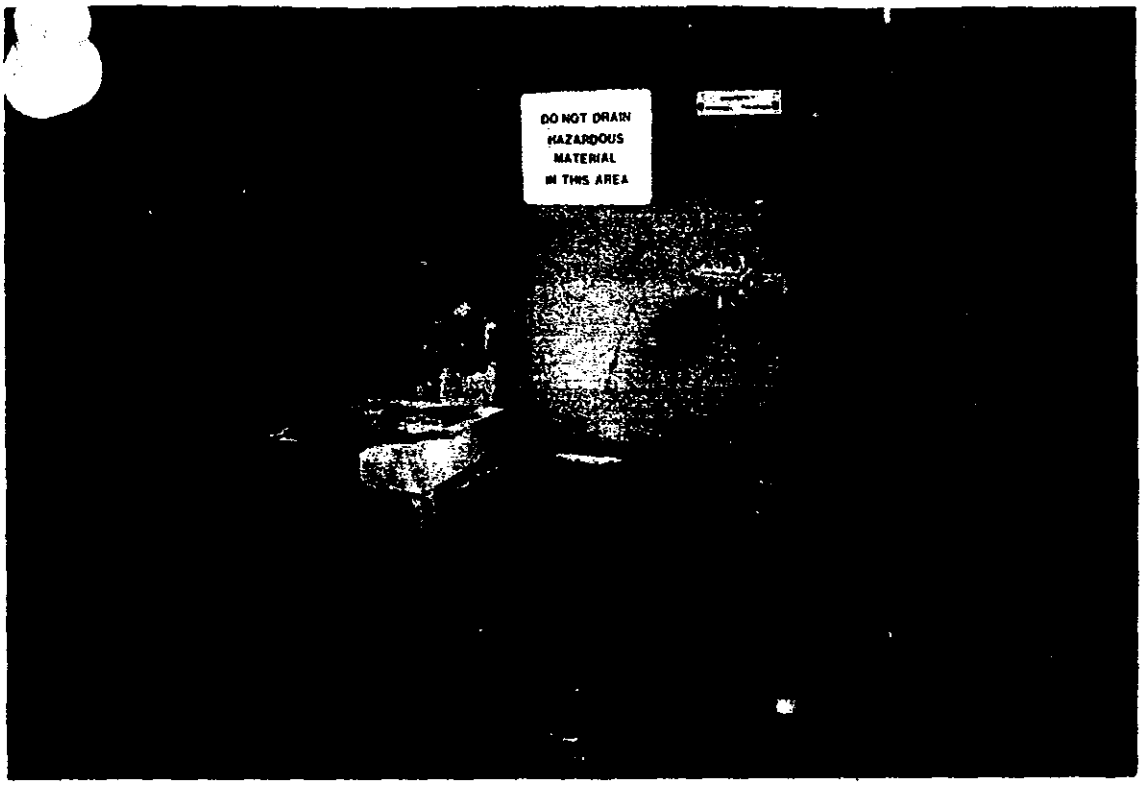
Maint. & Paint Shop

Area of Concern:

1. Violation of CWA

2. Requires NPDES permit

3. Discharge of Hazardous waste into reported storm drain



Photograph 3

Maint. & Paint Storage Area

Area of concern:

1. Violation of RCRA and CWA

2. NPDES permit required

3. Discharge of Hazardous Material into reported storm drain

Photograph 4

Used Oil Storage Area

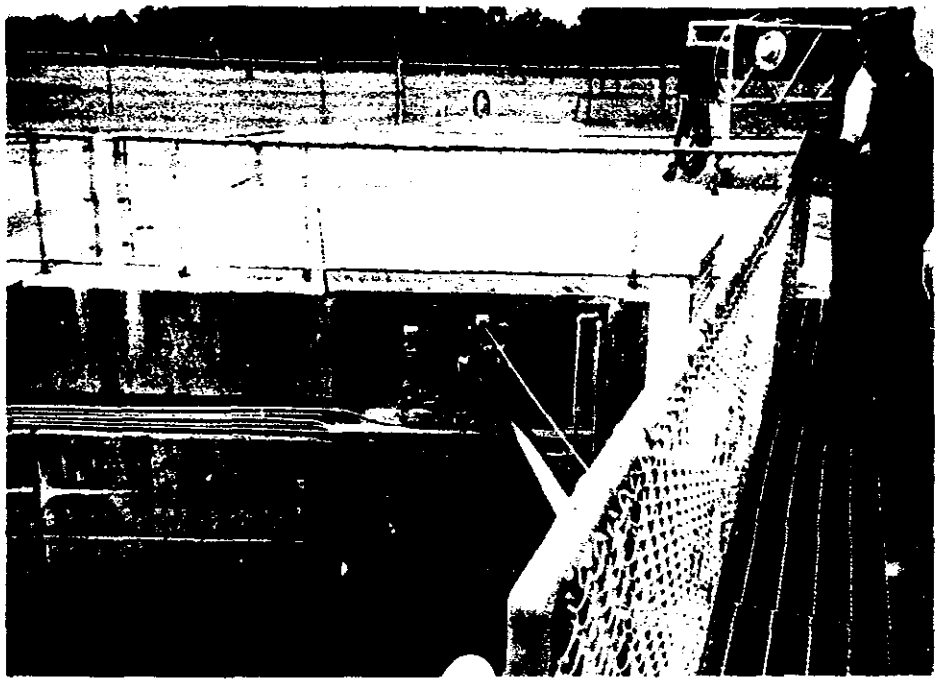
Area of Concern:

1. Violation of RCRA

2. Soil contamination

3. Requires spill contingency plan

4. Housekeeping



Photograph 5

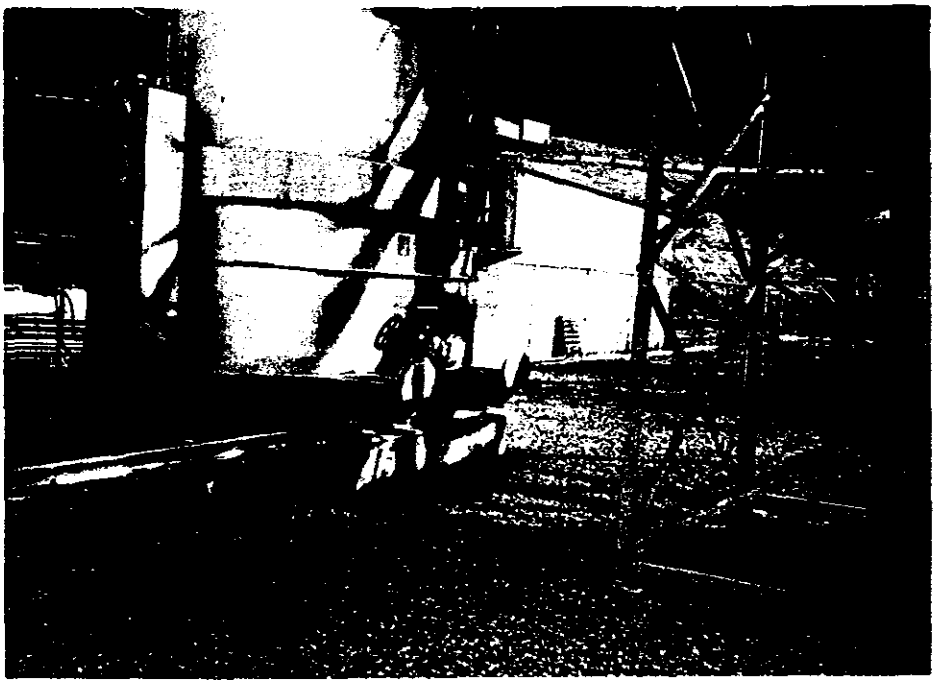
Lock and Dam

Area of Concern:

1. Violation of CWA

2. Spill prevention plan

3. Contamination of project waters



Photograph 6

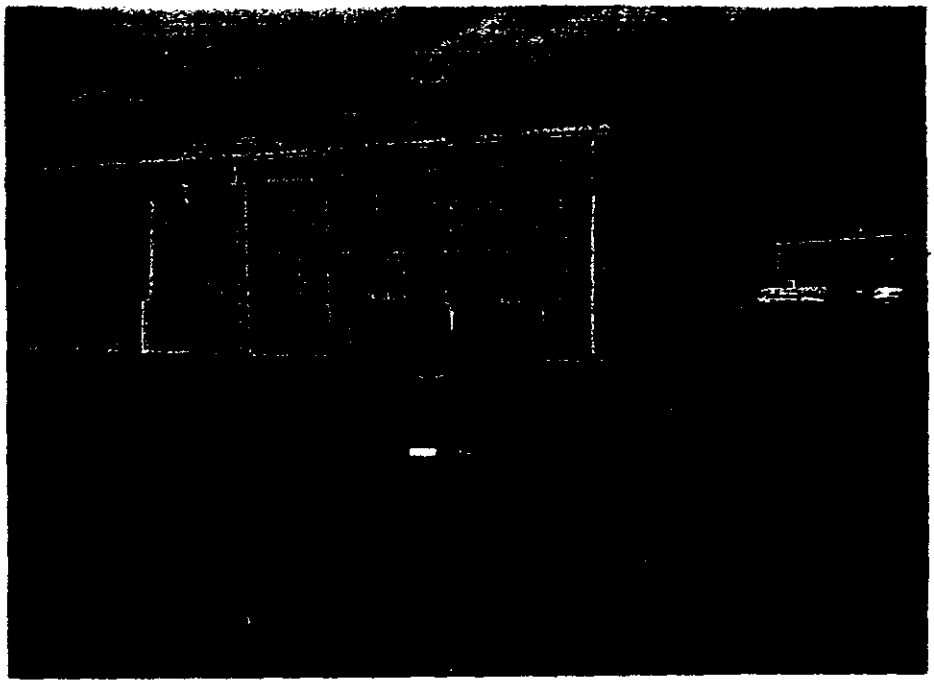
Hydropower Plant Transformers

Area of Concern:

1. Violation of CWA and CERCLA

2. Soil contamination

3. Discharge of Hazardous materials (possible PCB)



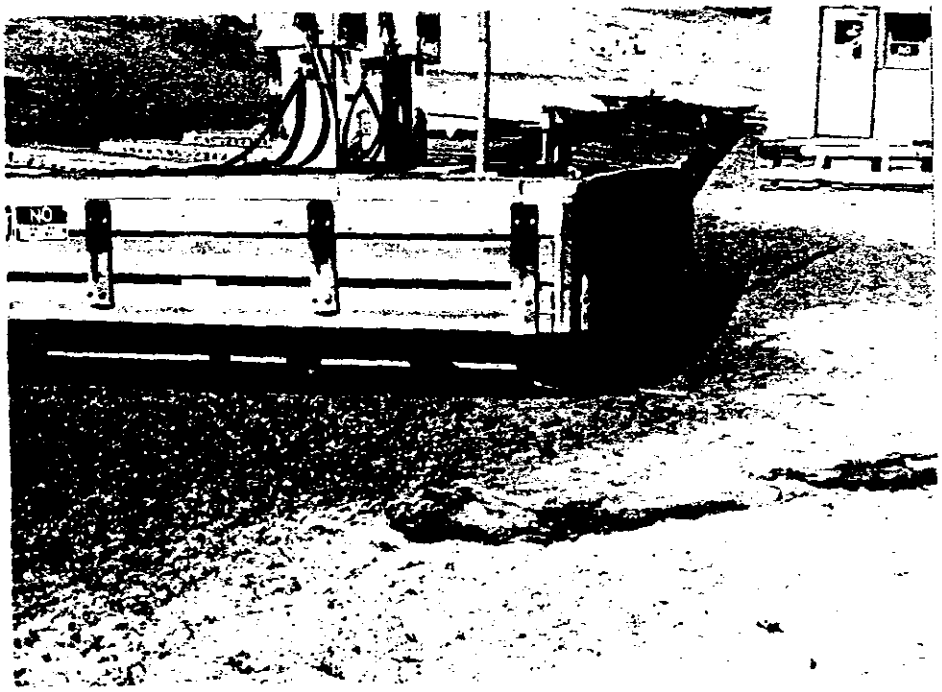
Photograph 7

Diesel Oil Storage Tanks

Area of Concern:

1. Soil contamination

2. Location of storm drain requires spill contingency plan



Photograph 8

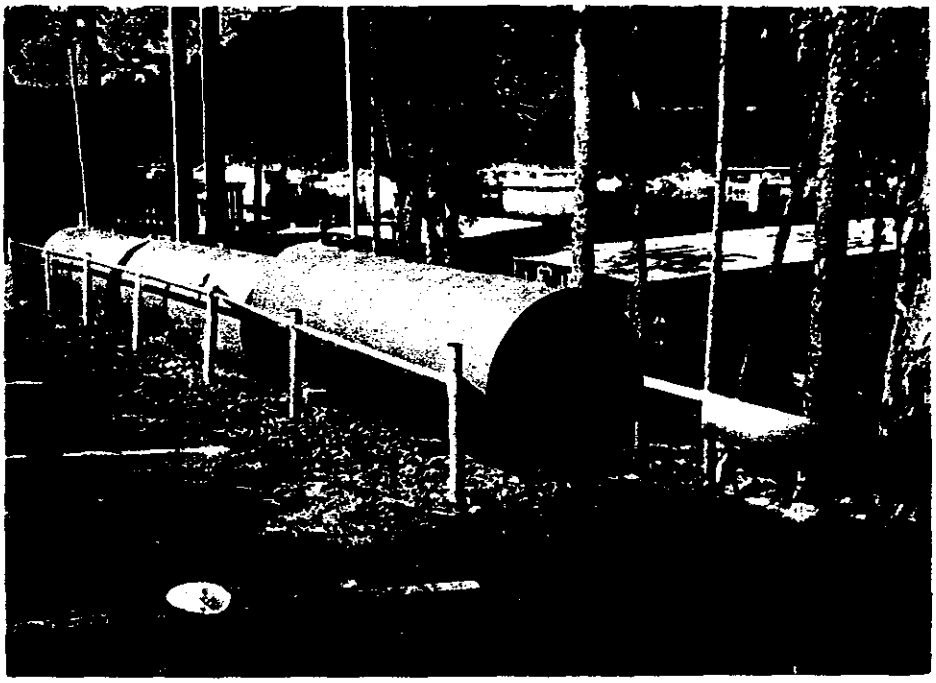
Gasoline Dispensers in a Marina.

Area of Concern:

1. Violation of CWA

2. Contamination of project waters

3. Lack of environmental compliance/enforcement on real estate lease



Photograph 9

Fuel Storage Area in Marina.

Area of Concern:

1. Violation of CWA

2. Requires spill contingency plan

3. Lack of environmental compliance/enforcement on real estate lease

Photograph 10

Dispensing Area

Area of Concern:

1. Soil contamination

2. Spill contingency plan

3. Housekeeping

Photograph 11

Solid Waste Disposal site

Area of Concern:

1. Violation of solid waste disposal regulations

2. Creosote timbers: Violation of CERCLA

3. Potential NPL site

Photograph 12

Used Drums & Metal Storage Area

Area of Concern:

1. Violation of RCRA and solid waste regulations

2. Soil contamination

3. Improper storage of HTW

4. Lease enforcement

Photograph 13

Storage/Wash and Fuel Transfer Site

Area of Concern:

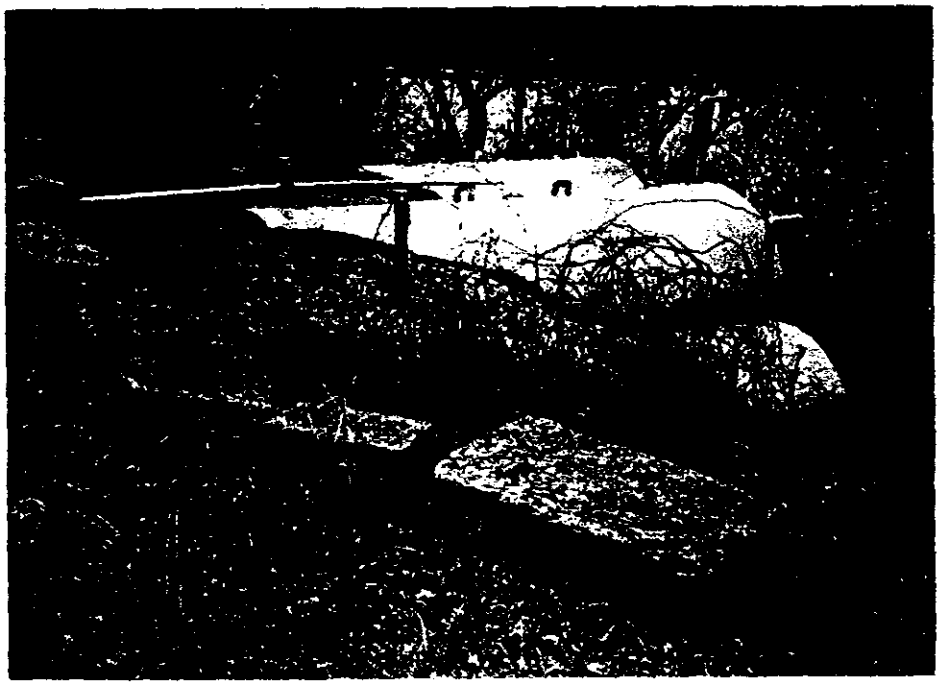
1. Violation of RCRA and CERCLA

2. Soil contamination

3. Requires spill contingency plan

4. Improper storage of hazardous materials

5. Housekeeping



Photograph 14

Fuel Storage Area

Areas of Concern:

1. Violation of RCRA and CWA

2. Requires spill contingency plan

3. Underground fuel storage tank requirements

Photograph 15

Batteries Storage Area

Area of concern:

1. Violation of CWA, CERCLA

2. Contamination of Project Waters

3. Lease enforcement

Photograph 16

Contractor's Storage Tank

Area of Concern:

1. Violation of CWA

2. Soil contamination

3. Enforcement of Contract Requirements for Environmental Compliance.

4. Spill contingency plan

Photograph 17

Oil Rights Outgrant

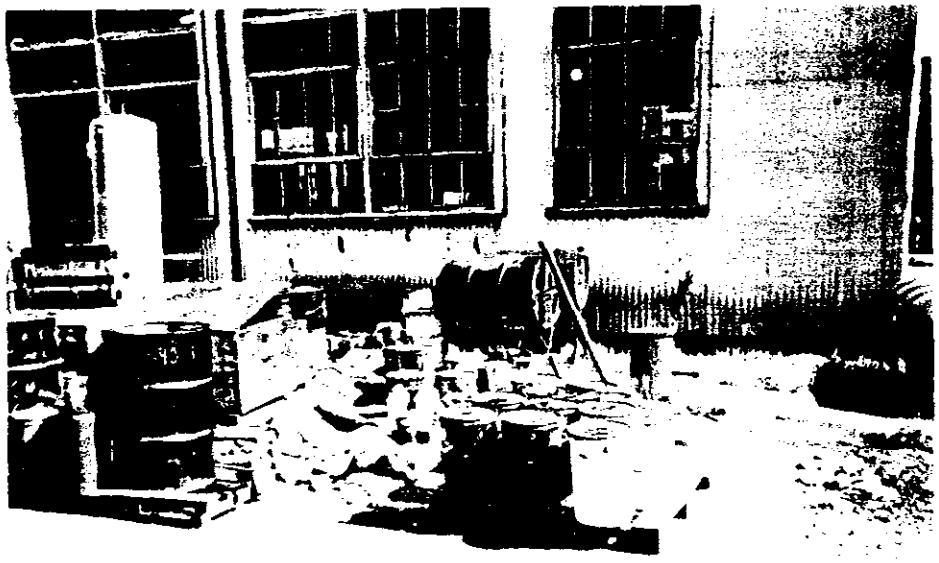
Area of Concern:

1. Violation of RCRA, CWA

2. Soil Contamination

3. Lease enforcement

4. Spill contingency plan



Photograph 18

Oil, Paint Storage Area

Area of Concern:

1. Violation of RCRA

2. Improper storage of HTW

3. Soil contamination

4. Housekeeping

5. Spill contingency plan

Photograph 19

Paint, Oil Storage Area

Area of Concern:

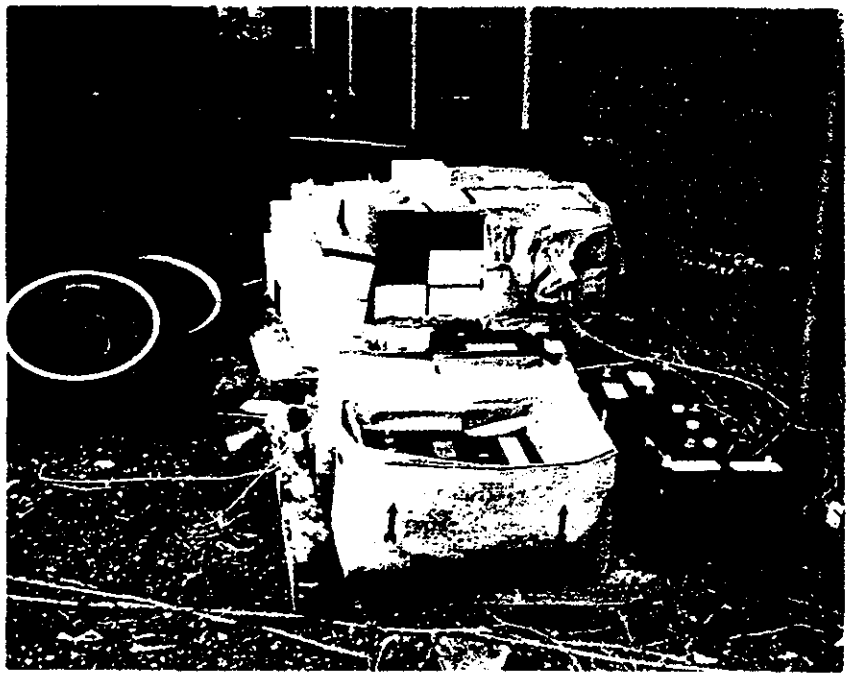
1. Violation of RCRA, CERCLA

2. Soil contamination

3. Improper storage/disposal of HTW

4. Housekeeping

5. Spill contingency plan



Photograph 20

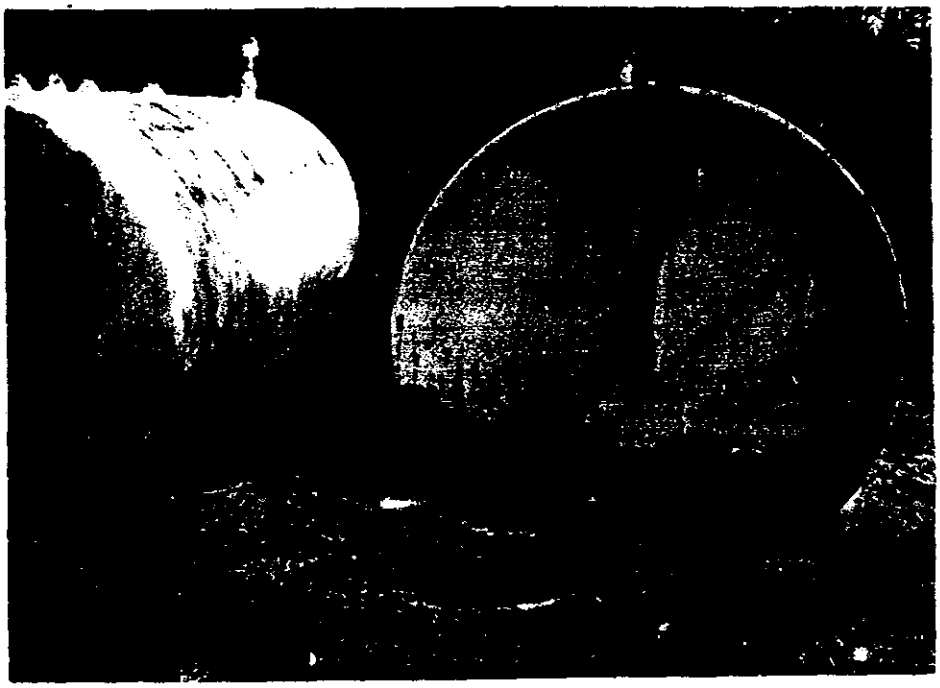
Batteries Storage Area

Area of Concern:

1. Violation of RCRA, CERCLA

2. Improper storage/disposal of HTW

3. Spill contingency plan



Photograph 21

Fuel Tanks

Area of Concern:

1. Violation of RCRA

2. Spill contingency

Photograph 22

Contractor's Fuel Dispensing Area

Area of Concern:

1. Soil contamination

2. Poor housekeeping

3. Spill contingency plan

Appendix C

ENVIRONMENTAL COMPLIANCE

ABBREVIATION LIST

CAA	-	Clean Air Act
CFR	-	Code of Federal Regulations
CO	-	Carbon Monoxide
CWA	-	Clean Water Act
DoD	-	Department of Defense
ECC	-	Environmental Compliance Coordinator
EPA	-	Environmental Protection Agency
ECAS	-	Environmental Compliance Assessment System
ERGO	-	Environmental Review Guide for Operations
FIFRA	-	Federal Insecticide, Fungicide, and Rodenticide Act
FWS	-	U.S. Fish and Wildlife Service
MP	-	Management Practice
MSDS	-	Material Safety Data Sheet
NAAQS	-	National Ambient Air Quality Standards
NEPA	-	National Environmental Policy Act
NFPA	-	National Fire Protection Act
NHPA	-	National Historic Preservation Act
NHRM	-	Natural and Historic Resources Management
NO^{I}	-	Nitrogen Oxides
NPDES	-	National Pollutant Discharge Elimination System
NRM	-	Natural Resources Management
OHSPC	-	Oil and Hazardous Substances Pollution Contingency Plan
OMP	-	Operational Management Plan
PCB's	-	Polychlorinated Biphenyls
pCi/L	-	picoCurie per Liter
PMP	-	Pest Management Plan
POL	-	Petroleum Based Fuel or Lubricant
PPM	-	Parts Per Million
RCRA	-	Resource Conservation and Recovery Act
SARA	-	Superfund Amendments and Reauthorization Act of 1986
SDWA	-	Safe Drinking Water Act
SHPO	-	State Historic Preservation Officer
SPCC	-	Spill Prevention Control and Countermeasures
TCLP	-	Toxic Constituent Leaching Procedure
TSCA	-	Toxic Substances Control Act
TSDF	-	Treatment, Storage, and Disposal Facility
UFO	-	Unidentified Flying Object
USACE	-	U. S. Army Corps of Engineers
UST	-	Underground Storage Tanks
VOC	-	Volatile Organic Compound

Appendix D

PHOTOGRAPH LISTING

Photograph #1 - Disturbed area needs to be seeded to prevent erosion.
Area near dam close to project office.

Photograph #2 - Fuel storage tank lacks secondary containment.
Upper Connecticut Basin Office.

Photograph #3 & 4 - Hydraulic system lacks secondary containment.
North Springfield Dam Control Tower.

Photograph #5 - Small open dump with dirt fill, rock, concrete rubble, and asphalt rubble all present.
On steep embankment along east shore of North Springfield Lake.

Photograph #6 - Tires stored at project.

Photograph #7 - Creosote coated timbers stored on project.

Photograph #8 - Scrap metal stored on project.

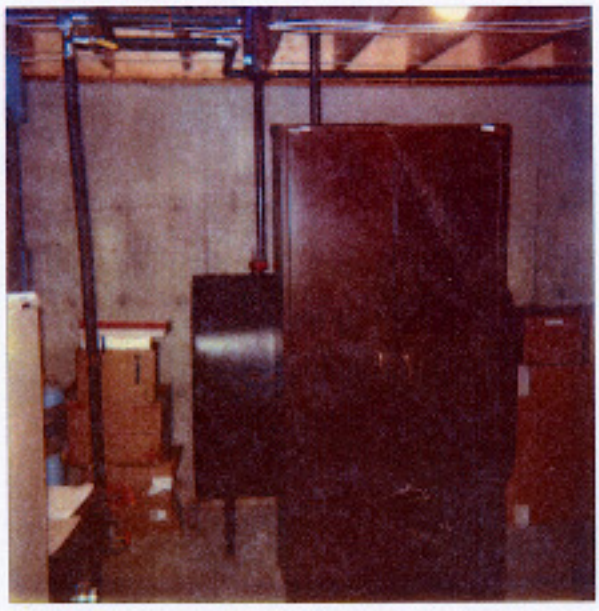
Photograph #9 - Unauthorized structure present in a forested area.
Area near dam.

Photograph #10- Transformer has never been tested for PCB's.
North Springfield Control Tower.

Photograph #11- Unregistered injection well in the form of floor drains.
Located in garages in project offices.

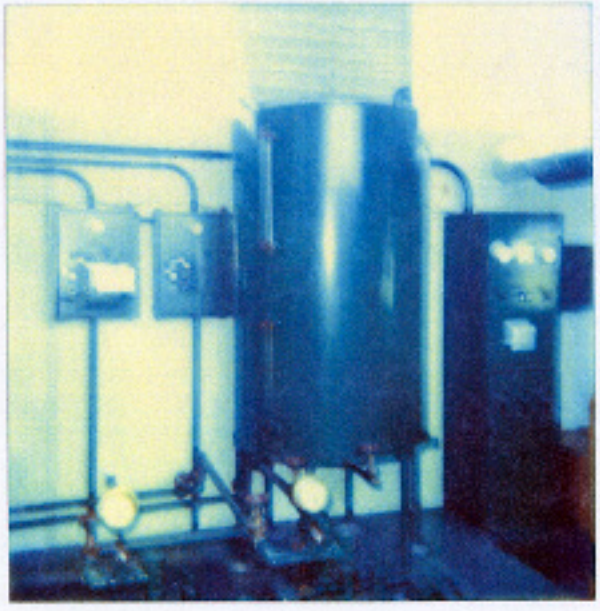
Photograph #12- Dredged disposal material on spillway.

Photograph #1



Photograph #2

Photograph #3



Photograph #4

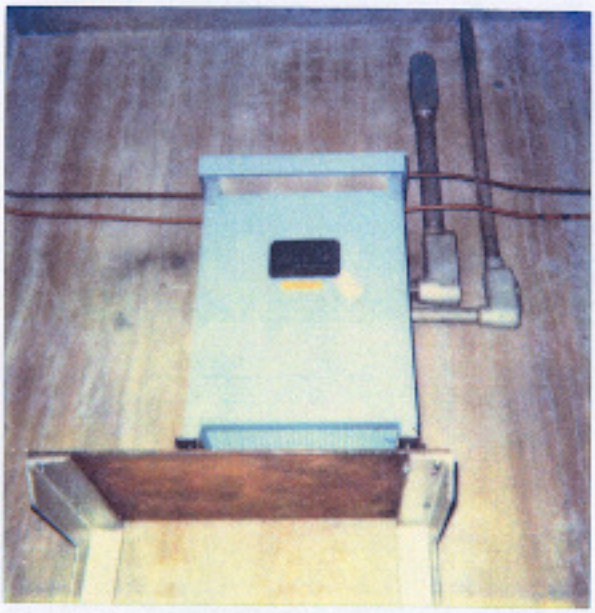
Photograph #5

Photograph #6

Photograph #7

Photograph #8

Photograph #9



Photograph #10

Photograph #11

Photograph #12

Appendix E

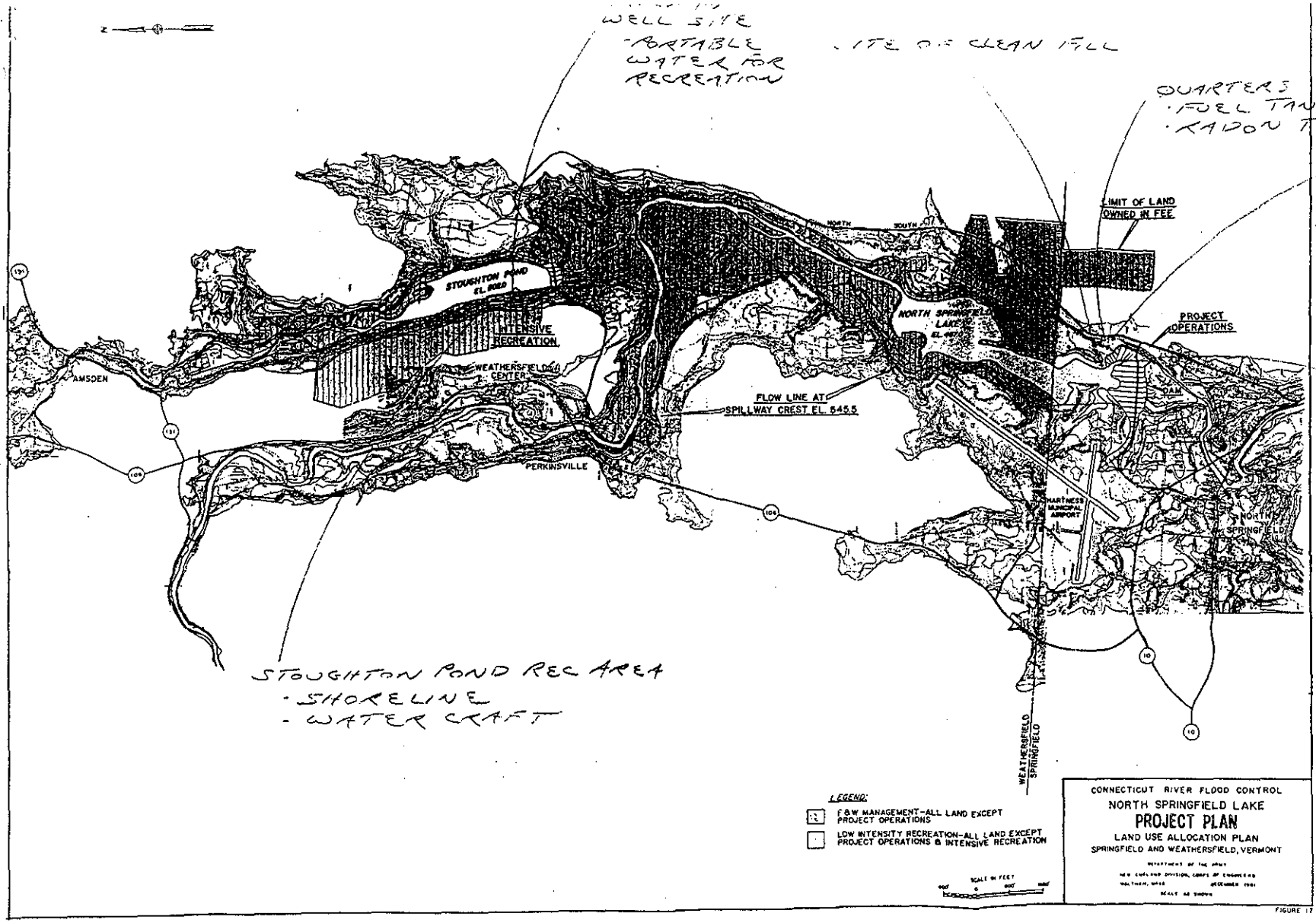

WELL SITE
-PORTABLE WATER FOR RECREATION
QUARTERS
-FUEL TANK
-RADON TEST
-OFFICE
-HAZMAT
-FUEL TA
-COMMERCIAL GAS
-RADON TEST
LIMIT OF LAND OWNED IN FEE
PROJECT OPERATIONS
STOUGHTON POND EL. 895.0
INTENSIVE RECREATION
NORTH SPRINGFIELD LAKE
WEATHERSFIELD CENTER
AMSDEN
FLOW LINE AT SPILLWAY CREST EL. 845.5
DAM
PERKINSVILLE
HARTNESS MUNICIPAL AIRPORT
NORTH SPRINGFIELD
WEATHERSFIELD
SPRINGFIELD
STOUGHTON POND REC AREA
-SHORELINE
-WATER CRAFT
LEGEND:
F&W MANAGEMENT-ALL LAND EXCEPT PROJECT OPERATIONS
LOW INTENSITY RECREATION-ALL LAND EXCEPT PROJECT OPERATIONS & INTENSIVE RECREATION
SCALE IN FEET
CONNECTICUT RIVER FLOOD CONTROL
NORTH SPRINGFIELD LAKE
PROJECT PLAN
LAND USE ALLOCATION PLAN
SPRINGFIELD AND WEATHERSFIELD, VERMONT

FIGURE 17

CENED-PL-I

27 July 1992
Bargerhuff/kw/7114

MEMORANDUM FOR: Director of Operations

SUBJECT: North Springfield Reservoir, Silt and Debris Removal, North Springfield, Vermont.

1. This environmental documentation has been provided per conversation with Jim Law requesting an impact analysis on operations and maintenance work at North Springfield Reservoir, Vermont.

2. The proposed work is a maintenance operation and will qualify as a categorical exclusion from NEPA documentation, and will be exempt from a evaluation based on Section 404 guidelines because there will be no discharge of fill material into the waterway.

3. Appropriate state Environmental Agencies have been coordinated with regarding this project.

4. Any further questions regarding this matter, POC is Mr. Kirk Bargerhuff on extension 7114.

S. Rubin

for JOSEPH L. IGNAZIO
Director of Planning

cc:Hubbard 113N
Penko
Law 106S
Bargerhuff 113N
IAD Files

SUBJECT: Environmental Analysis for North Springfield Reservoir, Siltation and Debris Removal at North Springfield, Vermont.

1. This environmental documentation is based upon the environmental considerations involving the removal of a buildup of sediments and debris surrounding the logboom at the North Springfield Lake. The logboom is designed to substantially reduce and prevent debris from entering the outlet structure.

2. The proper functioning of the logboom has been impeded by the collection of logs, debris, and deposition of siltation within the immediate area of the boom. Deposition of siltation limits the effectiveness of the logboom by allowing large trees and snags to become lodged near the outlet gates. The removal of silt and debris along the entire length of the logboom will need to be implemented in order to ensure the proper function of the logboom. The current deposition of silt and debris does threaten the integrity of effective operations at North Springfield Reservoir.

3. This is an identical action to that performed in 1990 at the same location by project personnel and will be a further continuation of the prior work, extending the dredging activity an additional 20 feet into the waterway.

4. The work as outlined would occur using a crane from the landward side of the reservoir and involve a dragline operation to remove sunken logs, debris, and deposited sediments. Material removed would be temporarily stored on an upland ledged hill site until dry. The length of the dredge area will be approximately 150 feet along the shoreline and approximately 60-80 feet into the waterway from the shore. The depth of the dredging will be up to six feet below the existing bottom elevation. An estimated 1000 - 1500 cubic yards of the siltation and sunken debris will be removed and deposited along the adjacent upland shore line or removed offsite. The material will be used as fill and graded to the adjacent existing upland slopes. The depth of the dredge will prevent most floating trees from hanging up on the bottom of the lake, thus greatly facilitating their removal.

5. The proposed work is a maintenance operation within the Federal Project necessary to carry out project purposes. Based on this determination, this proposed work will be exempt from an Environmental Assessment and an Evaluation by Section 404 guidelines. 33CFR 230.9 (b) and (c) list Federal actions which are categorically excluded from NEPA documentation as "(b) Activities at completed Corps projects which carry out the authorized project purposes." and "(c) minor maintenance dredging using existing disposal sites." This categorical exclusion does not, however, exempt the action from compliance with any other Federal Law (i.e. Fish and Wildlife Coordination Act, The Clean Water Act, etc.).

6. Since there will be no disposal of dredged or fill material into the waterway, a Section 404 (b) (1) evaluation will not be necessary. Additionally, since there is no discharge and Federal license or permit (404 (b) (1) evaluation), there will be no requirement for the Corps to receive a Section 401 Water Quality Certification from the State of Vermont (The State of Vermont does not necessarily agree with this since they require local interests to obtain a "WQC" for any action in the waterway). Any questions regarding this interpretation, should be directed to William A. Hubbard, Chief, Environmental Resources Branch, on extension 7552. This does not preclude the Corps of Engineers personnel on site from practicing sound environmental practices when working within the waterway. Work should be performed during fall, winter, or preferably during mid-late summer, during seasonal low flows.

7. In our review of Federal regulations, we have found no directive regarding the fate of the dredged materials which would constitute having to remove the material off-site. Therefore, the fate of the dredged material is up to the discretion of the Project Manager as long as it does not violate Federal regulations regarding wetlands or riparian vegetation. Dredged material can not be redeposited into a waterway. Disposal in this manner would qualify the material for evaluation based on Section 404 (b) (1) guidelines, and Vermont Water Quality Certification. Bales of hay should be placed along the length of the project shore near the waterline, as well as immediately downslope of the disposal areas to prevent unnecessary runoff and siltation from reentering the waterway.

8. The material removed from the project area will be graded to be consistent with the existing slope. Particular attention should be placed upon aesthetics and potential erosion, since the area of disposal lies within the grounds of the facility headquarters and is an area of high visibility. Reseeding the slope with grasses as soon as possible will stabilize the slope, thereby reducing or eliminating any potential effects of runoff into the water column and providing suitable aesthetic quality.

Tom Snow, Assistant Project Manager has indicated the dredged material, after leveling and grading, will be topsoiled and seeded with grass upon completion of the dredging activity. If the dredging activity occurs during the Fall, reseeding should at the least be implemented immediately the following Spring season.

9. We are aware the material affecting the performance of the logboom was not present during original project construction, consequently not providing the existing fisheries habitat. Nonetheless, fisheries habitat does now exist in and around the logboom, however limited by shallow depths. Removal of the material within the construction area will eliminate existing fisheries habitat. Submerged logs and debris provide cover and spawning areas for several freshwater species found in lakes and streams. Since the removal of the material will need to be implemented, compensation for a loss of available habitat can be accomplished by Corps personnel with a minimal level of effort.

a. Dredging the area around the immediate area of the logboom will, by itself, provide deeper pool areas for fisheries resources to utilize.

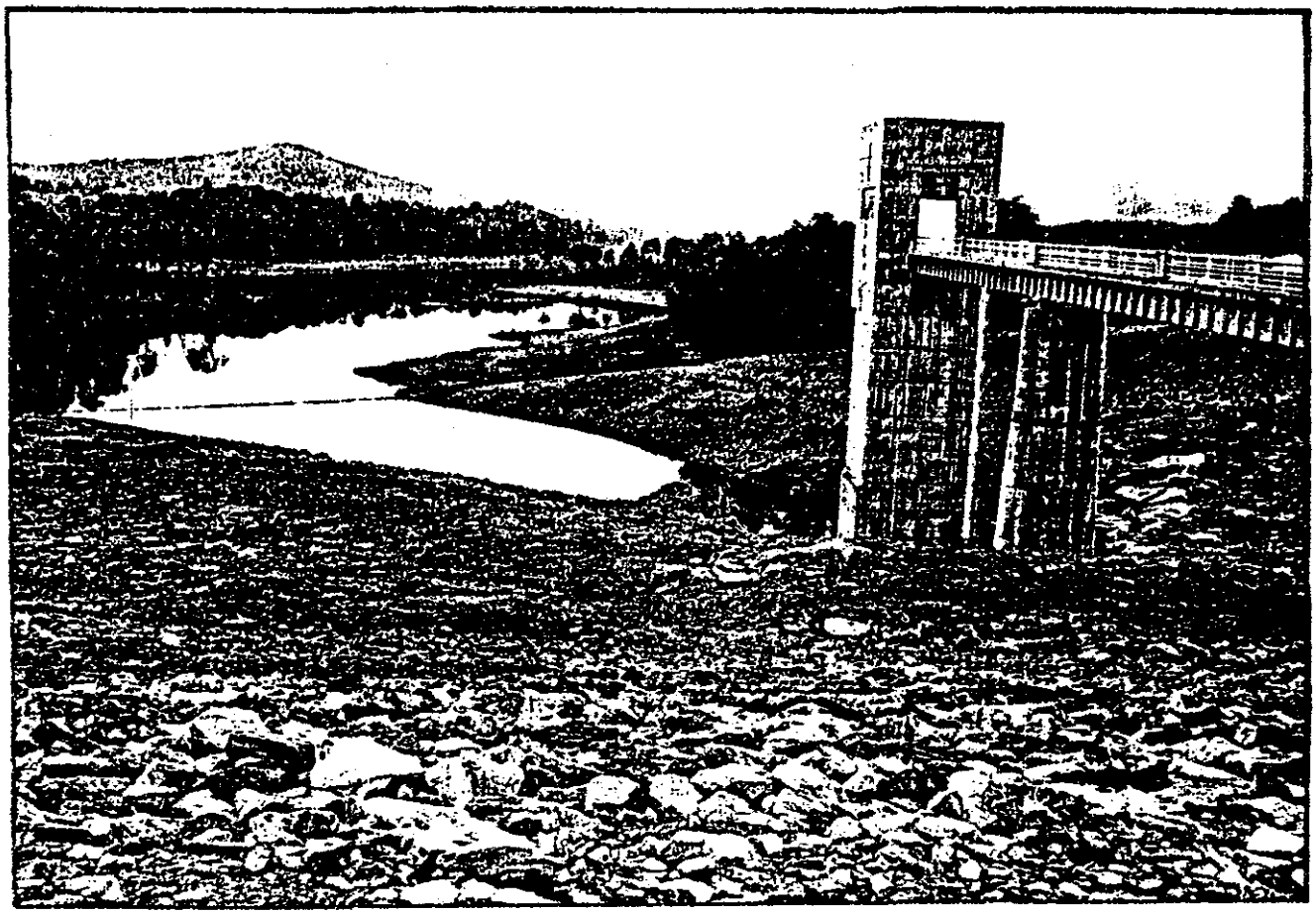
b. Any large submerged trees, logs, or brush which are removed can be taken to deeper aquatic areas within/around the lake and resubmerged to provide habitat for cover and spawning.

10. This memorandum and the ongoing coordination completes the environmental requirements (exclusions) for this action. Any questions, POC is Kirk E. Bargerhuff, extension 7114.

CULTURAL RESOURCE MANAGEMENT STUDY

NORTH SPRINGFIELD LAKE

SPRINGFIELD & WEATHERSFIELD, VERMONT



CULTURAL RESOURCE MANAGEMENT STUDY

NORTH SPRINGFIELD LAKE

SPRINGFIELD AND WEATHERSFIELD, VERMONT

Submitted by:

Peter A. Thomas

Peter A. Thomas

Prudence Doherty
and
E. Jan Warren

Submitted to:

Department of the Army

New England Division, Corps of Engineers

Contract No. DACW 33-81-C-0118

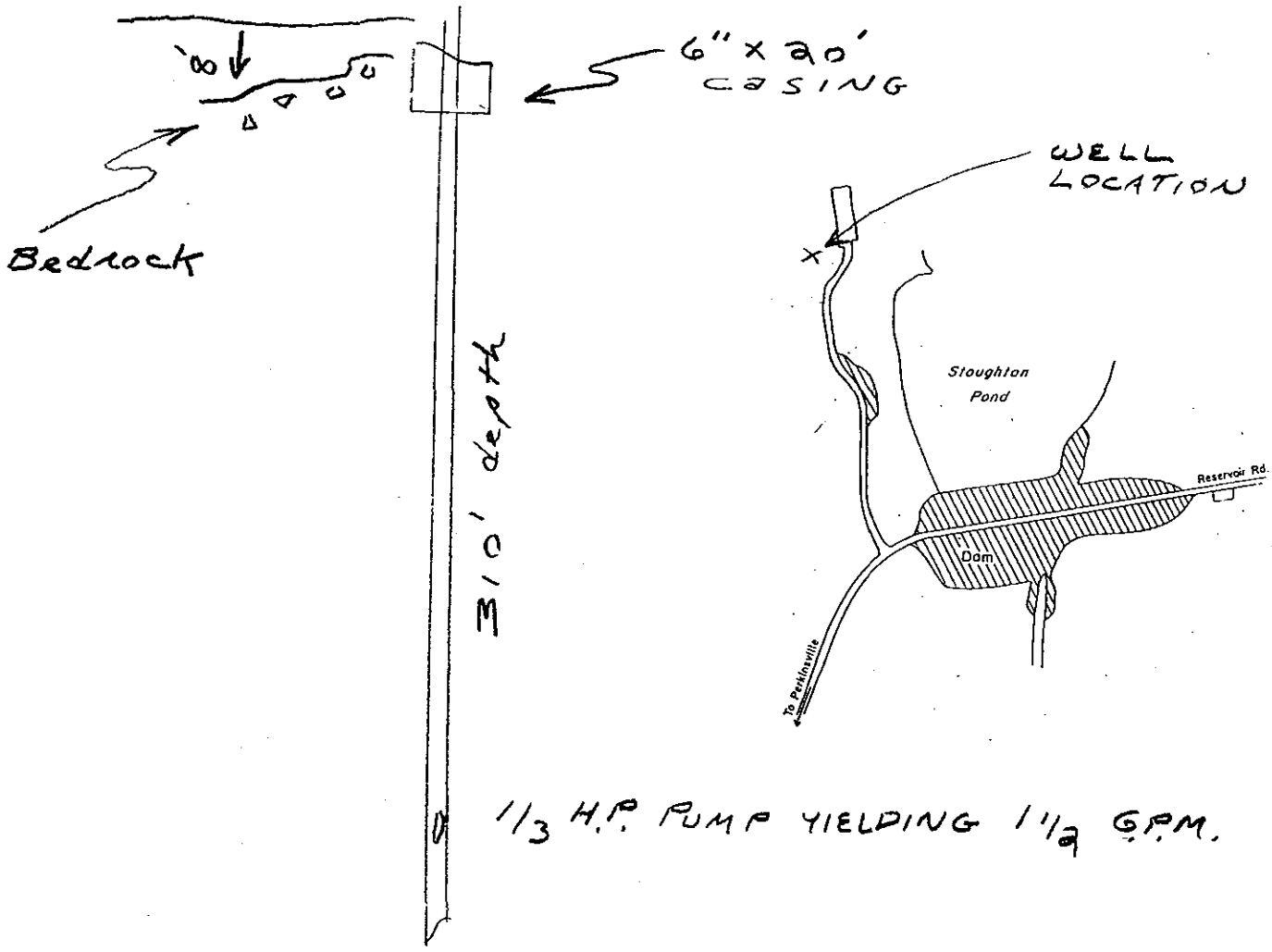
Department of Anthropology

University of Vermont

Report No. 38

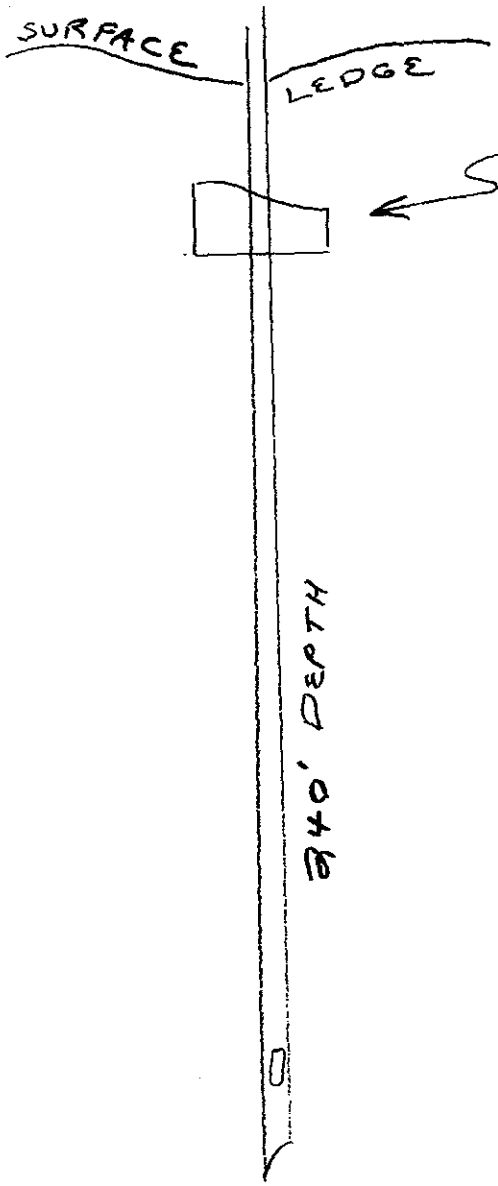
March, 1982

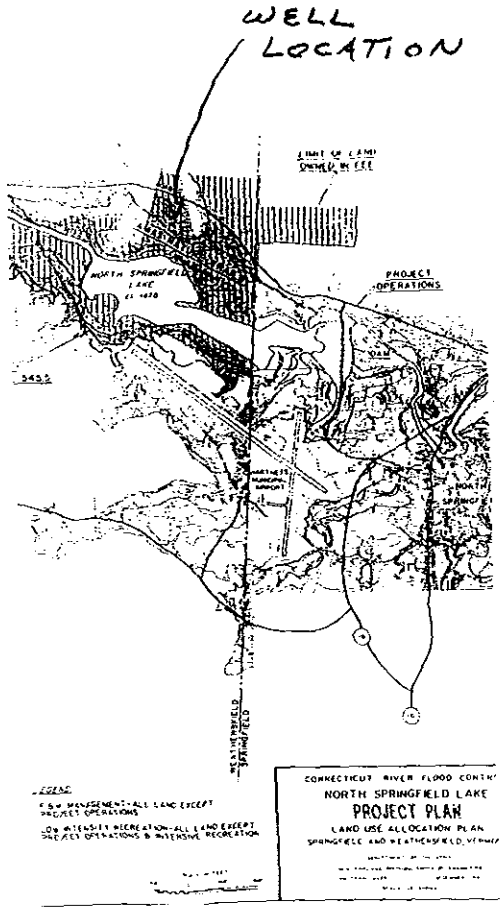
STOUGHTON POND REC. AREA,
NO. SPFLD. LT.



1/3 H.P. PUMP YIELDING 1 1/2 G.P.M.

UCRB OFF., NO. SPFLD. LK





3/4 H.P. PUMP YIELDING 7 G.P.M.
160 PSI 1 1/2" POLY WATER LINE
DRILLED 10/7 - 10/8/91

U.S. GEOLOGICAL SURVEY BULLETIN 1828

Prepared in cooperation with the
Vermont Geological Survey

DEPARTMENT OF THE INTERIOR
DONALD PAUL HODEL, Secretary

U.S. GEOLOGICAL SURVEY
Dallas L. Peck, Director

UNITED STATES GOVERNMENT PRINTING OFFICE: 1988

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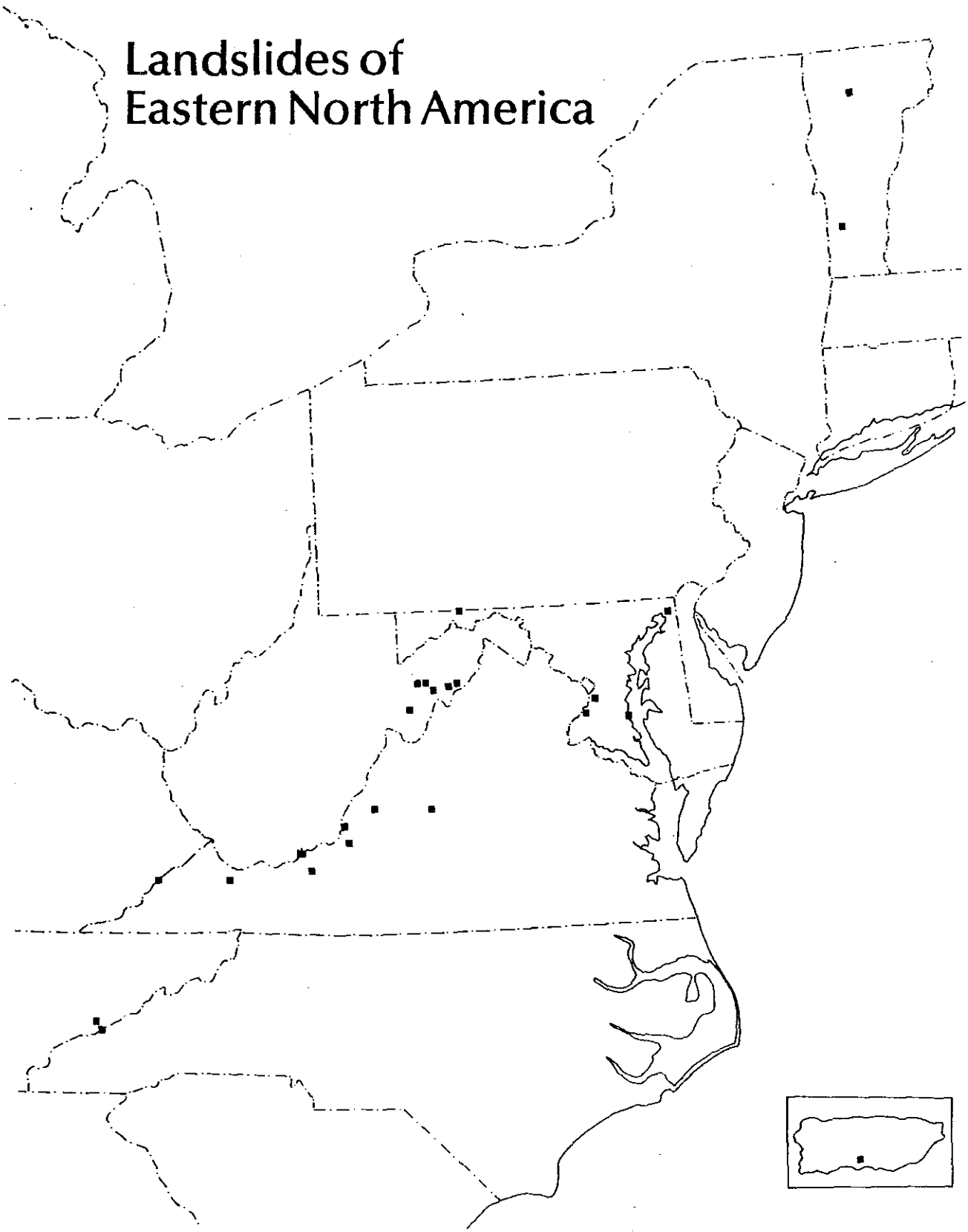
Landslides of Eastern North America



U.S. GEOLOGICAL SURVEY CIRCULAR 1008

DEPARTMENT OF THE INTERIOR
DONALD PAUL HODEL, Secretary

U.S. GEOLOGICAL SURVEY
Dallas L. Peck, Director

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Free on application to the Books and Open-File Reports Section,
U.S. Geological Survey, Federal Center,
Box 25425, Denver, CO 80225

SPECIFICATIONS

Treatments to Control Vegetation

North Springfield Lake, Springfield, VT

1. SCOPE OF WORK

a. The Contractor will furnish labor, materials, and equipment necessary to chemically treat the riprap slopes of dam, dike, and other sites, to control undesirable vegetative growth at North Springfield Lake, Springfield, VT. All live vegetation within specified boundaries is to be spot-sprayed with specified herbicides. Roundup will be used for general vegetation control, except that Rodeo will be used within ten (10) feet of any water. All 3/4" diameter and larger growth, and/or four (4) feet and taller, within boundaries shall be cut and removed from the site. Stumps remaining after cutting shall be chemically treated with a 50% to 100% solution of Roundup mixed with water, immediately after cutting. The contractor may be responsible for traffic control or restriction in some instances and must coordinate this effort with project personnel.

b. General work site areas are shown on the attached map.

2. CERTIFICATION. The Contractor must hold a current appropriate license issued by the State of Vermont for the work required and shall obtain and comply with any other necessary licenses or permits prior to beginning any work. The Contractor shall furnish evidence of current certification with submission of the bid, and also to project personnel before proceeding with the scheduled work.

3. APPLICATION AND SAFETY.

a. Chemicals are to be applied in accordance with the manufacturer's recommendations and at the rates detailed in these specifications. All applications will be in strict compliance with applicable Federal and State laws and regulations. No aerial applications shall be permitted. Copies of the Manufacturer's Safety Data Sheet for each herbicide to be used shall be submitted to the Project Manager at North Springfield Lake prior to application. No broadcast spraying shall be permitted.

b. All work shall be performed in a workmanlike manner and to the satisfaction of the Contracting Officer, or his representative. Time of work accomplishment shall be scheduled well in advance with project personnel as well as a pre-work conference to be held in advance of work commencement. Treatment shall be accomplished during the month of June and completed by 30 June. (Vegetation is growing vigorously at this time and most susceptible to treatment. It is highly visible and not drought retarded). Vegetation still alive 45 days after treatment shall be treated again at no additional cost to the Government. The work will be accomplished by 30 September (See paragraph 9 for payment and inspection conditions.).

c. The Contractor, while applying chemicals, shall take all precautions necessary for the protection of all persons, property, water courses, and natural resources, and will be held liable for any damages resulting from careless application of chemicals.

d. Accident prevention in all operations at the work sites will be performed in accordance with Corps of Engineers Manual EM 385-1-1, a copy of which will be provided to the Contractor in advance of the work. Contractor's employees on the job shall wear appropriate protective clothing (gloves, hats, respirators, etc.). The Contractor will submit his written proposals for compliance with accident prevention plans and meet with the Contracting Officer or his representative prior to start of work for review of provisions and manufacturer's Material Safety Data Sheets.

e. Chemicals shall not be applied during the following periods:

1) Twelve (12) hours before rain is predicted to occur.
2) During any showers or rainstorms.
3) During a twelve (12) hour period following a rainstorm.
4) When wind velocity exceeds five (5) miles per hour.
5) On Saturdays, Sundays, or holidays.

Work hours may be limited to eight (8) hours per work day.

f. Cleaning of equipment or disposal of unused chemicals or containers on Government land is not permitted. Transportation and disposal of toxic materials will comply with Title 40, CFR, Part 260-265.

g. The Contractor is responsible for the security of herbicides at all times, including non-work hours, when materials are to be under lock and key.

4. CORPS REPRESENTATIVES: Mr. Thomas Coen, Project Manager, North Springfield Lake, Springfield, Vermont, telephone no. (802) 886-2775, is the representative of the Contracting Officer. The Project Manager will also serve as inspector and shall be contacted prior to the application of herbicides.

5. EQUIPMENT. High pressure-type spray equipment shall be used, except where prohibited by State requirements.

6. HERBICIDE TREATMENT. Chemicals to be used shall be as follows:

ROUNDUP (41.0% Glyphosate plus surfactant to aid adherence and absorption).
EPA Reg. No. 524-308
Mixture: 2 gallons per 100 gallons of water.

RODEO (53.8% Glyphosate)
EPA Reg. No. 524-343
Mixture: 1.5 gallons per 100 gallons of water.

7. SUBSTITUTIONS: There will be no substitutions.

8. PRE-WORK CONFERENCE: A pre-work conference will be held prior to initiation of on-site activities to discuss the contract requirements, specifications, and provisions. To arrange a pre-work conference, contact Mr. Thomas Coen, Project Manager, North Springfield Lake, at (802) 886-2775. Time of work accomplishment at site shall be scheduled well in advance and only with the concurrence of project personnel.

9. INSPECTION AND PAYMENT: At the completion of herbicide application, the Contractor will be paid one half of the amount of the contract, upon submission of his invoice to the Government for payment. Forty-five (45) days after completion of the herbicide application, the treated sites will be inspected by the Contracting Officer's representative, with the Contractor, to determine the effectiveness of the application. Effective application is defined as a minimum vegetation kill rate of 95%. If it is determined that the herbicide application was less than 95% effective, then the Contractor will be required to re-treat those deficient areas at the Contractor's expense. Final payment will be made once the Government is satisfied that the kill rate is 95% or better and the Contracting Officer's representative accepts the work on behalf of the Government.

10. A Post-Application Documentation Form will be completed by the contractor for each herbicide applied and submitted to the Project Manager before any payment will be made. A sample of this form is attached.

AREA TO BE TREATED

North Springfield Lake, Springfield, VT 50 acres

Major Activities / Operations at USACE Projects and Related Sections

Major Activities/ Operations	SECTIONS I Air Emissions Mngmt.	II Cultural & Historic Resources	III Hazardous Materials Mngmt.	IV Hazardous Waste Mngmt.	V Natural Resources Mngmt.	VI Pesticides Mngmt.	VII POL Mngmt.	VIII Solid Waste Mngmt.	IX Special Pollutants Mngmt.	X UST Mngmt.	XI Wastewater Mngmt.	XII Wat Quali Mngm
1. Incinerators	•			•				•				
2. Heat/Power Production	•			•			•	•			•	
3. Fuel Storage	•		•				•					
4. Sanitary Wastewater											•	
5. Stormwater Runoff			•			•	•				•	
6. Sludge Disposal	•							•				
7. POL Dispensing							•					
8. Wastewater Treatment								•			•	
9. Vehicle Maintenance	•		•	•								
10. Shop Activities	•		•	•							•	
11. Solid Waste Generation								•				
12. Water Supply												•
13. Toxic/Hazardous Materials Use and Storage			•									
14. Firefighting Training	•						•				•	
15. PCB Electrical Equipment									•			
16. Pesticide/ Herbicide Use						•						
17. Environmental Noise									•			
18. Emergency Planning			•									
19. Asbestos Removal									•			
20. Underground Storage Tanks			•				•			•		
21. Remodeling Activities		•			•				•			
22. Construction Activities		•			•				•			
23. Soil Removal		•			•							

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